# Douglas County Planning Commission April 14, 2015

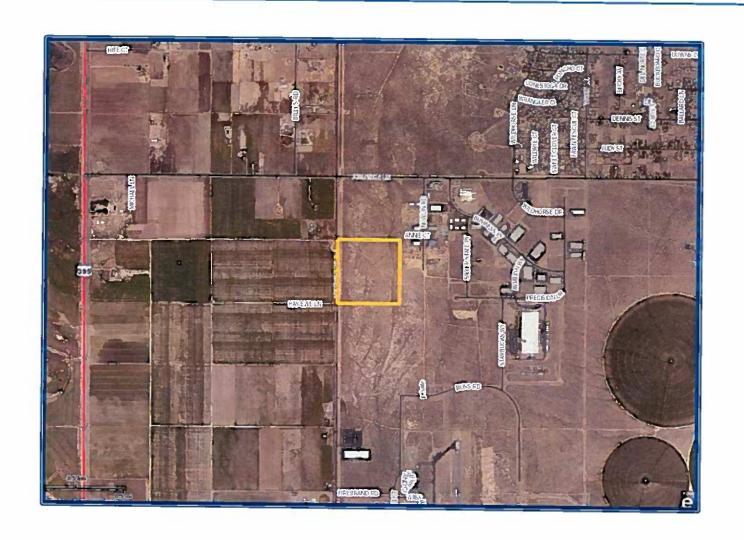
## Verizon Telecommunication Facility Special Use Permit



### Request

Maria Kim, on behalf of Verizon Wireless, is requesting approval of Development Application (DA) 14-074, a Special Use Permit to allow Telecommunication Facility. The facility is proposed to include a new 105 foot steel monopole and associated 11.5 foot by 17 foot equipment shelter, and other supporting infrastructure. The subject property is located on Heybourne Road, south of Johnson Lane and north of the Minden Airport, within the Light Industrial (LI) zoning district, and within the Airport Community Plan. The Assessor Parcel Number (APN) is 1320-05-001-007.

### **Project Location**





### **Project Objective**

Pg. 1/10 of packet: (from the applicant's Project Support Statement)

"The Proposed Facility is intended to improve capacity issues, provide congestion relief for existing Verizon sites and provide reliable service to the area."

### Code Provisions

Telecommunication Facilities may locate in the LI zoning district subject to issuance of a Special Use Permit and Design Review Approval, as well as subject to supplemental standards. (Douglas County Code 20.658.020, 20.668.190, 20.664.180)

The Planning Commission may grant a Special Use Permit upon making each of the required findings contained in Section 20.614.030 of the Douglas County Code.

### Finding A

A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations.

The subject property is located in the Airport Community Plan.

#### **Applicable Goals and Policies**

AP Goal 1: To promote the growth of the Airport community as an employment center and transportation hub for County wide economic development that is compatible with the built and natural environments in the vicinity and consistent with the Airport Master Plan.

### Finding A (page 2 of 3)

AP Policy 1.1: Douglas County shall use its zoning, project review process, and design guidelines to promote development that will enhance property values and the aesthetics of the Airport community while still maintaining a buffer around the Airport perimeter for safety and noise abatement.

AP Goal 2: To promote planned development in the Airport community that reduces risks related to airport activities.

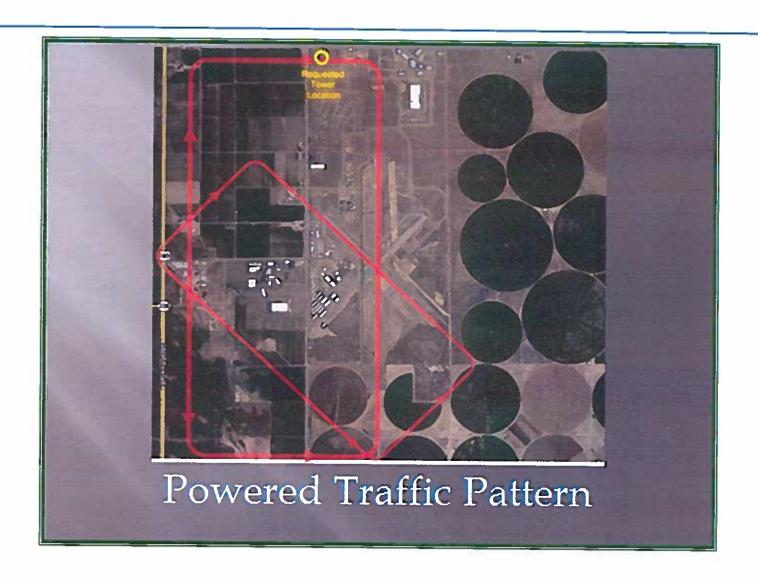
AP Policy 2.2: The County shall preclude land uses in the flight path that pose unacceptable hazards to airport operations or development near the Airport. These can include, but should not be limited to, uses that attract flocks of birds, uses that attract wildlife, uses storing significant quantities of toxic or explosive substances, and uses that result in reduced visibility and/or electronic disturbances.

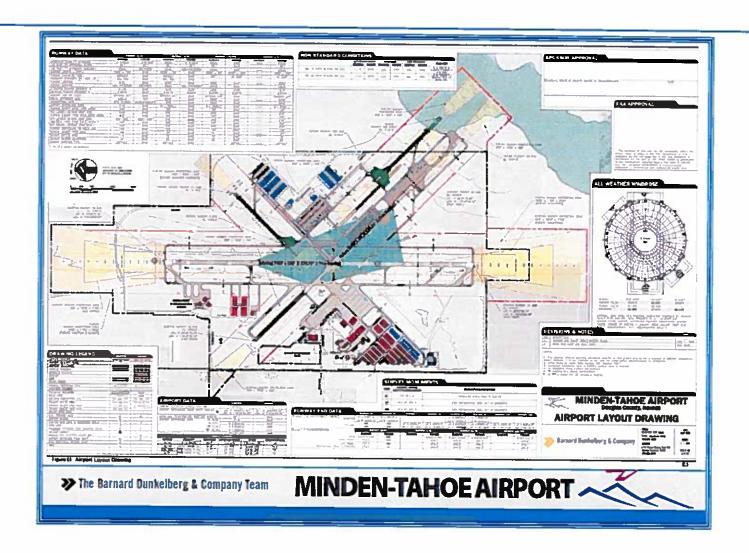
### Finding A (page 3 of 3)

Tower conflicts with Airport Plan (FAA and BOCC approved) future precision approach (conflict with AP Goal 1).

Tower will be a land use in the flight path that poses an unacceptable hazard to airport operations (conflict with AP Policy 2.1, 2.2), and will create a change in flight patterns that will create noise impacts in residential areas (conflict with AP Policy 1.1).

- Existing pattern is per the Noise Abatement Procedures to avoid flying over the residential area north of Johnson Lane. The placement of an obstacle in this location will necessitate air travel over the residential area, thus violate the noise abatement procedures.
- ☐ The Airport Master Plan includes a planned approach surface consistent with FAR 77. The proposed tower would breach the approved approach surface.





### Finding B

B. The proposed use is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include, but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both, to mitigate such impacts.

The proposed use will yield an adverse effect on the area nearby the airport in that it interferes with the flight path. The existing flight paths are determined, in part, to minimize noise impacts on the residences in the Johnson Lane area. If the tower were erected, and flight paths need to be modified for safety. The modified flight path could result in a pathway above the residences in the Johnson Lane area, thus creating a noise impact.

### Finding E

E. The proposed use incorporates features to minimize adverse effects, including visual impacts and noise, of the proposed special use on adjacent properties.

**Staff Response:** The proposed use will yield an adverse effect on the area nearby the airport in that it interferes with the flight path. The existing flight paths are determined, in part, to minimize noise impacts on the residences in the Johnson Lane area. If the tower were erected, and flight paths needed to be modified, the modified flight path could result in a pathway above the residences in the Johnson Lane area, thus creating a noise impact.

### Finding G

G. The proposed special use complies with all additional standards imposed on it by the particular provisions of Chapter 20.604 (Special Use Permits) and all other requirements of Title 20 applicable to the proposed special use and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of Title 20.

Section 20.664.180 of the Douglas County Code identifies supplemental standards for telecommunication facilities. The proposed application does not comply with these supplemental standards. For example, the supplemental standards allow for a maximum height of 80 feet in the LI zoning district. The applicant is seeking a 105 foot tall monopole.

### Finding H

H. The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare; or result in material damage or prejudice to other property in the vicinity.

The proposed use will be materially detrimental to public safety. The proposed tower location interferes with the established and FAA approved flight paths. These flight paths are derived from runway locations and FAA regulations that address noise and safety. These flight paths can not be altered.

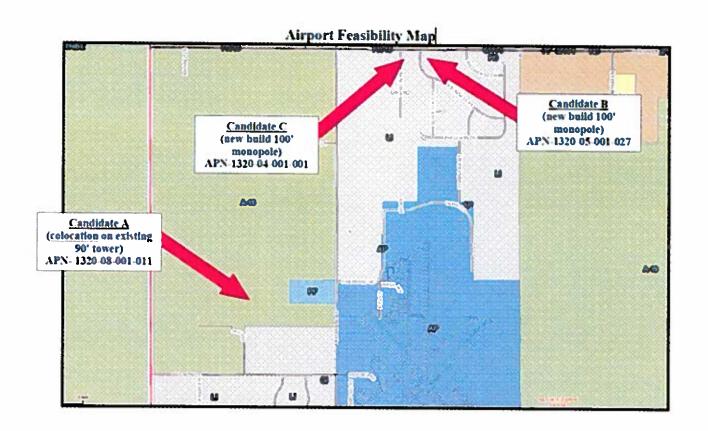
### FAA Letter

- □ 2/4/15: FAA issues a Determination of No Hazard to Air Navigation
- □ FAA did not visit site, nor did it consult with local airport management.
- □ FAA did not consider the Noise Mitigation Program.
- □ FAA did not consider adopted plans for future precision approach.

### How Did We Get Here?

- □ 5/9/13: Complete Wireless Consulting contacts local airport management re: three potential tower sites.
- □ 5/13/13: Airport Management advises co-location on Tower A (nx slide) is preferable.
- □ Since 5/13/13 Airport Management has tried to work with Verizon to identify a site that will not compromise airport operations. (Attachment 4)
- □ 5/13/2014: Planning Commission approves a SUP for a monopole for Verizon at 1738 Timber Ct.
- □ 11/20/14: Verizon submits application with knowledge of airport conflict.

### Sites Suggested By Verizon in 2013



### Recommendation

Deny Special Use Permit (DA) 14-074 of a Telecommunication Facility based on the inability to make required Special Use Permit findings A, B, E, G, and H for the reasons stated in the staff report.

#### General Aviation

Pilot Information

General Information

Approach/Departure

Airport Map

Noise Abatement

Airport Driver's Exam

Fixed Base Operations

**Fuel Providers** 

Airport Use Ordinance

#### Noise Abatement

#### Noise Abatement and Operational Procedures

Pilots flying their aircraft as quietly as possible and avoiding unnecessary overflights of residential areas are the keys to a successful noise management program. Our program focuses on pilot education and cooperation. Expenence proves that this offers the greatest relief to the community.

The noise abatement procedures established at our Airport have been prepared to help you operate your aircraft in the quietest manner possible, consistent with safety. The procedures are designed so the Airport can be a good neighbor to the surrounding residential communities. Please comply with these guidelines unless deviations are made necessary by weather, an in-flight emergency, or other safety considerations.

#### **Summary of Recommended Procedures**

#### Departures.

#### Runway 16

Southbound - Straight out Northbound - Right downwind over Hwy 395

Southbound - Left downwind over Hwy 395 Avoid residential areas south of airport Northbound -Turn left heading 320 before crossing Johnson Lane Avoid residential areas north of airport

#### **Noise Reduction Tips**

- 1 Reduce propeller RPM as soon as safe and practical
- 2. Climb out at Vx (may not be practical in all aircraft -- refer to your POH)
- 3. Avoid abrupt power changes

#### FAR 91.119 Minimum Safe Aititudes:

Except when necessary for takeoff or landing, no person may operate an aircraft below the following attitudes

- 1. Anywhere An altitude allowing, if a power unit fails, an emergency landing with undue hazard to persons or property on the surface
- 2. Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000' above the highest obstacle within a horizontal radius of 2,000' of the aircraft
- Over other than congested areas. An altitude of 500' above the surface, except over open water or sparsety populated areas. In those cases, the aircraft may not be operated closer than 500' to any person, vessel, vehicle, or structure
- 4. Helicopters. Helicopters may be operated at less than the minimums prescribed in paragraph (b) or (c) of this section if the operation is conducted without hazard to persons or property on the surface. In addition, each person operating a helicopter shall comply with any routes or allitudes specifically prescribed for helicopters by the Administrator

#### Thank you for your cooperation.

Safety always supersedes noise abatement procedures

For more information, comments, or suggestions, please contact. Minden-Tahoe Airport

1146 Airport Road Minden, NV 89423 775-782-9871

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#### 10APR2015

From: Gary B. Swift

To: Whom it may concern

Subject: Community input on proposed siting of new cell tower

It has come to my attention that plans are being made to install a new cell tower near the intersection of Heybourne Road and Johnson Lane in Minden, NV. Unfortunately, this is directly in the normal path of departing traffic from runway 34 at Minden-Tahoe Airport.

Per established noise abatement procedures (Reference 1), recommended northbound departures from runway 34 are directed to turn left heading 320 (northwest) before crossing Johnson Lane. Depending on the rate of climb of the aircraft, it is possible that the proposed new cell phone tower would create an obstacle sufficient to force departing aircraft to continue on the departure heading of runway 34 for an extended period, which would result in unwanted noise for the residents of Johnson Lane neighborhoods.

Additionally, per Reference 2, Minimum Safe Altitude (MSA) is an altitude of 1,000 feet above the highest obstacle within a horizontal distance of less than 2,000 feet; (when flying over a "congested area" of a city, town, or settlement). The legal definition of congested area is very nebulous, and it is very likely that conservative pilots would consider the proposed site for the new cell tower to be "congested," and therefore, to be avoided - by heading straight over Johnson Lane neighborhoods, or even turning northeast (rather than northwest) after departing runway 34.

Recommendation: To avoid forcing departing aircraft to fly over Johnson Lane neighborhoods (which would create unwanted additional noise pollution) please reevaluate other potential sites for the proposed new cell tower, and select a spot that is much further away from the traffic pattern for Minden-Tahoe Airport.

Reference 1: Minden-Tahoe Airport Website Noise Abatement page: http://mindentahoeairport.com/general-aviation/pilot-information/noise-abatement/

Reference 2: 14 CFR 91.119 Minimum Safe Altitudes: http://www.ecfr.gov/cgi-bin/text-idx?node=14:2.0.1.3.10#se14.2.91\_1119

Respectfully,

Gary B. Swift Private Pilot, Airplane (Single Engine Land), Glider PO Box 1326 Gardnerville, NV 89410

# Verizon Tower 2014-AWP-7310-OE

Airspace Analysis for Minden-Tahoe Airport Existing and Future

Prepared by Federal Airways & Airspace®



### **Proposed Tower**

- Located at:
  - Latitude: N39° 01′ 22.66″
  - Longitude: W119° 45′ 33.67″
- Elevation
  - Ground Elevation: 4685' AMSL
  - Above Ground Level: 106'
  - Overall Structure Height: 4791' AMSL





- •Proposed tower is located North by Northwest; 4672 feet from MEV Runway 16.
- •The proposed site is 470 feet west of Heybourne Road.

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- •Proposed tower is located 4188 feet from Runway 16 Centerline extended (Along-Track) and 2076 feet Runway 16 Centerline extended offset (Abeam).
- •The Along-Track and Abeam distances are important for calculation of allowable height.

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### **FAA Findings**

- Impact (None):
  - No Part 77 Impact
  - No VFR Impact
  - No IFR Arrival or Departure Impact
  - No Cumulative Impact
  - No Impact on Future Airport Expansion
  - No Impact to any plan on File
  - No Electromagnetic Interference (EMI)
- FAA Marking and Lighting Requirements
  - None



### Douglas County Staff Findings

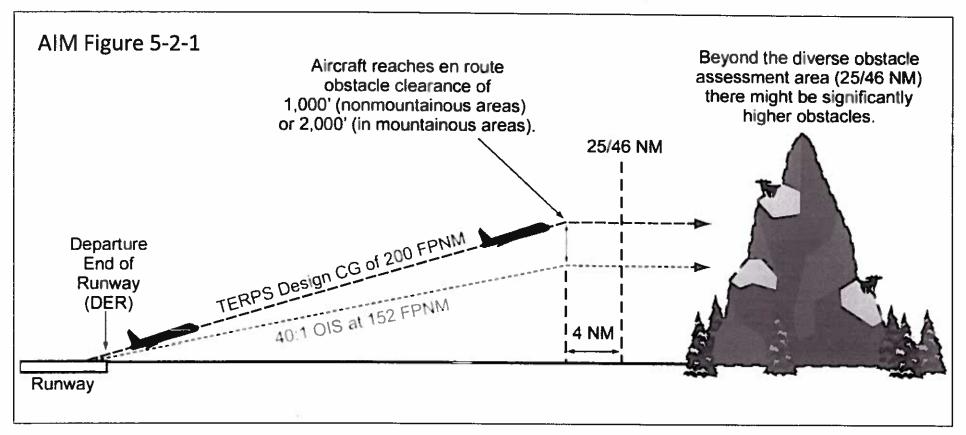
### Impact:

- Conflict with various airport operations
  - 1. Runway 34 Departure Impact
  - 2. Runway 16 Approach Surface Breach
  - 3. Conflict with Flight Patterns; Interferes with Flight Path that could result in a pathway above residences in the Johnson Lane area, thus creating a noise impact
  - 4. Impact Future FAA Flight Paths



### Obstacle Departure Procedures

FIG 5-2-1
Diverse Departure Obstacle Assessment to 25/46 NM



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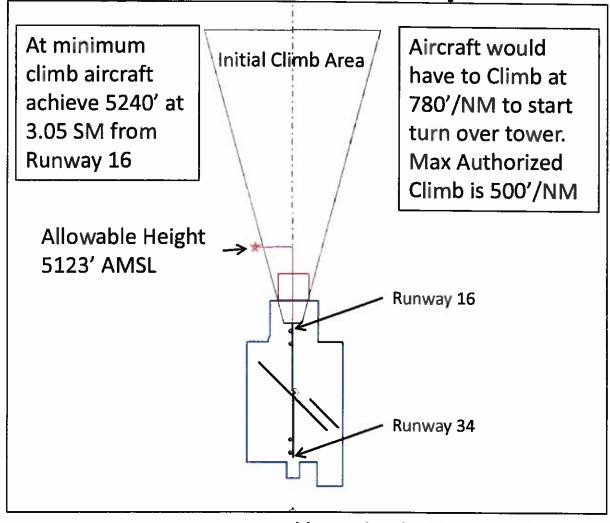


### 1. No Runway 34 Departure Impacts

- Takeoff Runway 34 :
  - "Climb Heading 345" to 5240 then direct IBWIC..."
    - Minimum Climb Gradient is 200 ft/NM
    - The Departure end of the runway (DER) is Runway 16
    - Heading 345° is straight out along the Runway 16/34 centerline extended
    - FAA procedure does not permit a turn until achieving
       5240' AMSL or 532' above the elevation of Runway 16
  - Proposed Structure is not in the Initial Climb Area (ICA) trapezoid as defined by FAA Order 8260.3B
  - Maximum Allowable Height for proposed tower is 5123' AMSL



### No Runway 34 Departure Impacts

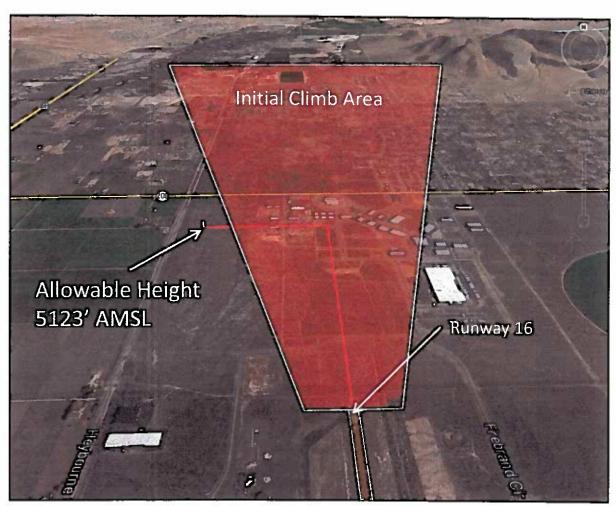


- 1. Minimum Climb is 200'/NM.
- 2. Climb To: 5240' MSL.
- 3. Tower is located in Diverse Departure Area.
- 4. Abeam Distance is 2076 feet.
- 5. Along Track Distance is 4188 feet.
- 6. Obstacle Clearance Slope is 40:1.
- 7. Once Aircraft has achieved 5240' MSL, turn can begin.

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### Runway 34 Departure Worst Case



- •If aircraft could achieve 5240' AMSL, by the time it crossed the departure end of the Runway (16), it would still be climbing and would be 449 feet above the proposed tower at it made the turn.
- •The height and location of the proposed tower will have no impact on departure from any runway at this airport.

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### 2. No Runway 16 Approach Surface Breach

- Runway 16 Approach Surface:
  - Current Minimums for both Runway 16 & 34 are 1 1/4 mile.
  - Staff Calculations failed to consider width of the Approach Surface and the Transitional Surface.
  - The Approach Surface has two parts, the Approach and Transitional. These makeup the protected area for pilots.
     These are defined in Title 14 CFR Part 77.19(d) & (e).



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### No Runway 16 Existing Approach Surface Breach

- Runway 16 <u>Non-Precision</u> Approach Surface:
  - Based upon the approach minimums of 1 ¼, the non-precision width of the Runway 16 Approach Surface is 500 feet and has a 34:1 slope. The half-width of the approach surface, at the tower's Along-Track distance of 4188 feet from the Runway 16 end, is 848 feet. At this point the Transitional Surface begins.
  - Transitional Surface extends upward and outward at a slope of 7:1. Since the tower is located 2076 feet off the centerline extended we subtract 848 from 2076 (2076 848 = 1228). This places the tower 1228 feet inside the transitional surface and <u>not</u> in the approach.
  - The calculated height of the obstruction surface [77.19(d)& (e)] is 5000 feet
     MSL or 209 feet <u>below</u> the surface limits.



### Not in Runway 16 Approach Surface

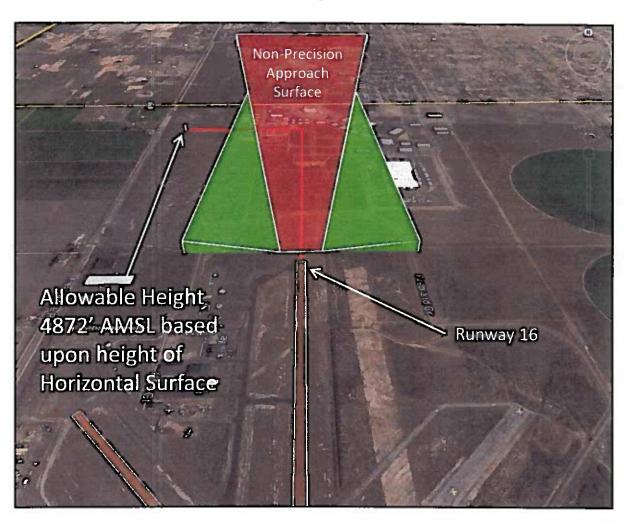


- •Construction of the Approach Surface does not locate the proposed tower within the Approach Surface to any airport runway.
- •Runway Parameters per FAA Order 7400.2K: Inner Width = 500 ft Outer Width = 3,500 ft Length = 10,000 ft Slope = 34:1 Flair Ratio = 0.15 Runway Elevation = 4708 ft

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### Not in Runway 16 Transitional Surface



- •Construction of the Approach and Transitional Surface does not locate the proposed tower within either.
- •Proposed Tower Height is limited to height of Horizontal Surface (4872 ft).
- •No impact to approach surface of any airport runway.

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### No Runway 16 Future Approach Surface Breach

- Worst Case Analysis
- Runway 16 <u>Precision</u> Approach Surface:
  - Based upon the approach minimums of < 3/4 mile, the precision width of the Runway 16 Approach Surface is 1000 feet and has a 50:1 slope. The half-width of the approach surface at the tower's along track distance of 4188 feet from the Runway 16 end is 978 feet. At this point the Transitional Surface begins.
  - Transitional Surface extends upward and outward at a slope of 7:1. Since the tower is located 2076 feet off the centerline extended, we subtract 978 from 2076 (2076 978 = 1098). This places the tower 1098 feet inside the transitional surface and <u>not</u> in the approach surface.
  - The calculated height of the obstruction surface [77.19(d)& (e)] is 4927 feet
     MSL or 136 feet <u>below</u> the surface limits. Actual limit is 4872 feet based upon Horizontal Surface.

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#### **Worst Case**

- •Proposed Verizon
  Tower Location shown
  with Precision
  Approach Surface 77.19(d)&(e).
- •Proposed tower is located in Transitional Area.
- •NO breach of the approach surface is possible as the proposed tower is not located under the approach surface.

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#### **Calculation**

- •Apch Hgt = ½ \* Initial Approach Width + (Distance -200) \* .15
- •Initial Approach Width = 1000'
- •Distance Along Track = 4188'
- •Distance Abeam = 2076'
- •Width of 50:1 Surface
  - •½ \* 1000 + (4188-200)\*.15
  - = 1098' (Width)
- •NO breach of the approach surface is possible as the proposed tower is not located under the approach surface.
- Transitional Surface Height
  - Apch Hgt + Trans Distance/7
  - •4788' + (2076' 1098')/7
  - = 4927' AMSL
  - •Below Surface (4927 4791) = 136'



# 3. No Conflicts with Flight Pattern Runway 16/34

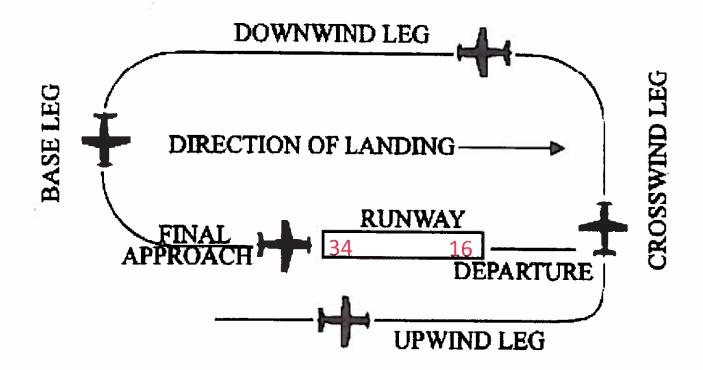
- No Impact with Runway 34 Departure as discussed earlier.
- Runway 16 has a Right Hand Traffic Pattern; Runway 34 has a Left Hand Traffic Pattern. Both are west of the airport.

#### Guidelines

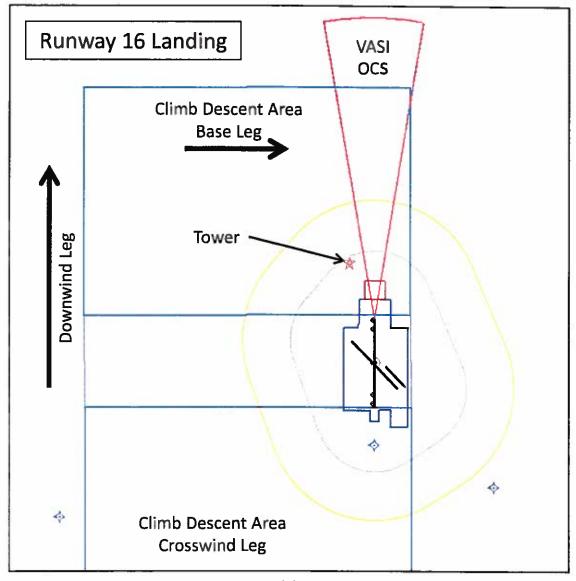
- Downwind/Upwind Legs must be at traffic pattern altitude (5722' MSL) (See Flying Handbook, page 7-3).
- Base Leg turn allows aircraft to align with Runway 16. A VASI on Runway 16 provide alignment and elevation guidance to land.
- Object located in Base Leg or (Climb/Descent Area), are permitted to be a maximum of 350 feet above the airport elevation (FAA Order 7400.2K, Fig 6-3-10).



# VFR Flight Pattern

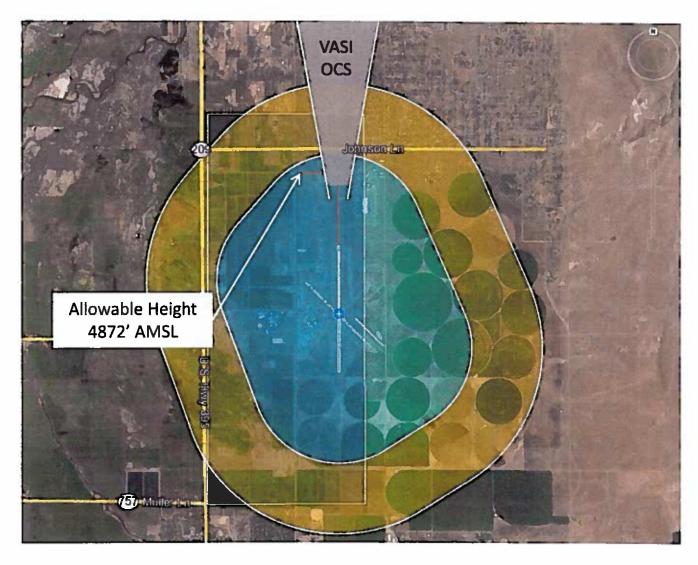






- •VFR Aircraft flying the Right Hand Traffic Pattern (RHTP) to Land on Runway 16 will turn on Base Leg and align with Runway 16 Approach using VASI for alignment and descent.
- •The subject tower is not located within the VASI protected area and will not impact the approach.
- •The subject tower is below the Horizontal Surface (4872' AMSL) and is not in an approach surface; hence is not a obstacle for VFR aircraft.





- •All components of VFR Traffic Pattern Airspace are shown in figure.
- •Proposed tower is not in VASI Obstacle Clearance Surface.
- •It is within the confines of traffic pattern area but 55 feet below the lowest qualifying surface.
- •There is no impact to any VFR Flight Pattern.



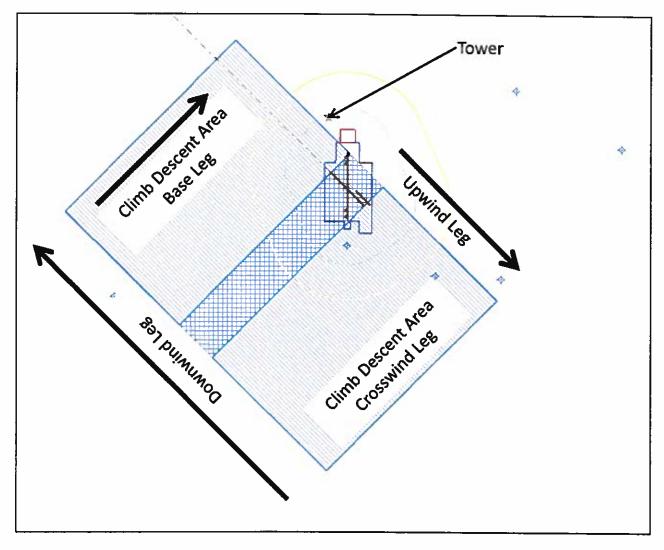
# 3. No Conflicts with Flight Pattern Runway 12/30

 Runway 12 has a Right Hand Traffic Pattern; Runway 30 has a Left Hand Traffic Pattern. Both are southwest of the airport.

#### Guidelines

- Downwind/Upwind Legs must be at traffic pattern altitude (5722' MSL) (See Flying Handbook page 7-3).
- Base Leg turn allows aircraft to align with Runway 12 after the turn.
- Proposed Tower is not located in Base Leg or (Climb/Descent Area) and not located within the Upwind Leg. Aircraft flying the Upwind Leg must be at Traffic Pattern Altitude (5722' MSL).





- •VFR Aircraft flying the Right Hand Pattern to Land on Runway 12 will turn on Base Leg and align with Runway 12.
- •The subject tower is not located within any portion of the VFR Traffic Pattern Airspace for Runway 12/30.
- •There will be no impact caused by the proposed tower to any aircraft flying a Right Hand Pattern for Runway 12 or Left Hand Pattern for Runway 30.
- •See FAA Order 7400.2K, Figure 6-3-13. Aircraft flying any portion of the Upwind Leg must be at traffic pattern altitude.



## 3. No Conflicts with MEV LNAV GPS-A Approach



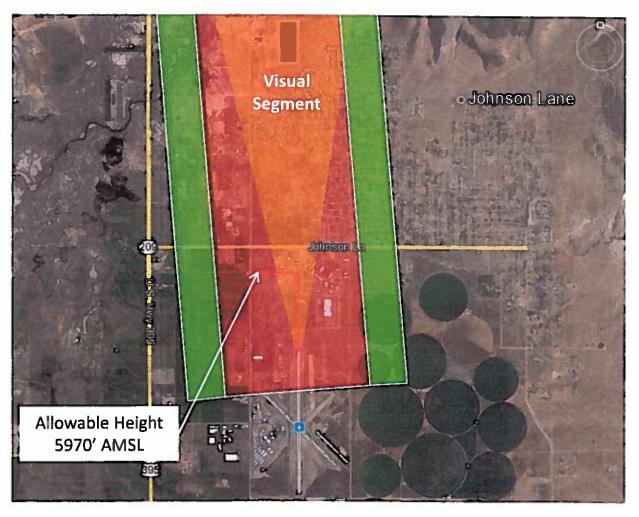
- •Subject Tower is located within the RNAV GPS-A Final Approach Segment.
- •The Minimum Descent Altitude (MDA) of this procedure is 6220' MSL.
- •The required Obstacle Clearance in this segment of flight is 250 feet.
- •The proposed tower is 1429' below the MDA and 1179 feet below the maximum allowable height.
- No change to the flight pattern of this procedure.



# 3. Existing GPS-A Flight Path

- Course Alignment is 160°.
- Runway 16/34 Alignment is 164.86°.
- Alignment within ±15° for a GPS procedure, is usually considered straight-in. However, the procedure is considered a circling procedure with a straight-in component.
- Proposed tower does not cause any violation of any FAA flight rules; nor will pilots have to deviate from existing flight path because aircraft will is not located within the visual segment of the approach.

## 3. No Conflicts with GPS-A Visual Segment



- •While the subject tower is located within the RNAV GPS-A Final Approach Segment, it is not located within the visual segment.
- •No change to the flight pattern of this procedure.
- •Circling minimums allow for a tower to 5900' AMSL based upon the GPS-A procedure.
- •The GPS-B Circling Procedure would permit a maximum height of 6300' AMSL.

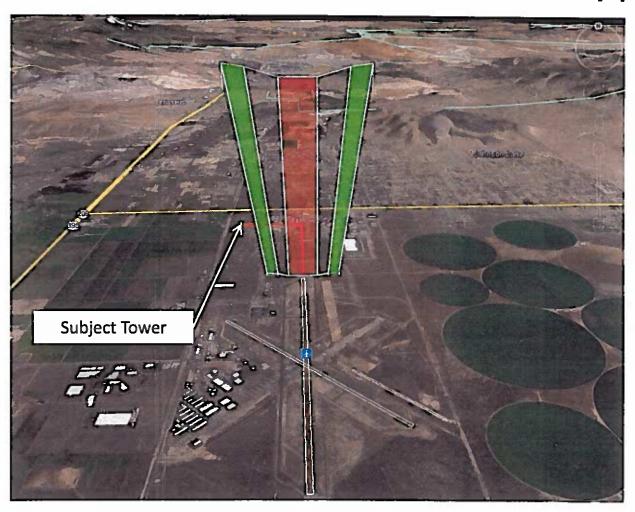


# 4. Future LPV Flight Path

- FAA Order 8260.58 only allows a ±3° deviation from the Runway
  Centerline. The existing GPS-A deviation from the runway centerline is
  greater than 3°. Therefore, the procedures must take a different flight
  path.
- Runway 16/34 Alignment is 164.86°.
- An ILS/LPV have the design trapezoids (W, X and Y). Analysis for an LPV is essentially the same as an ILS.
- Proposed tower will <u>NOT</u> cause any violation any future FAA flight rules, altitudes or procedures. The proposed tower will not cause design waivers to a future ILS or LPV for Runway 16.



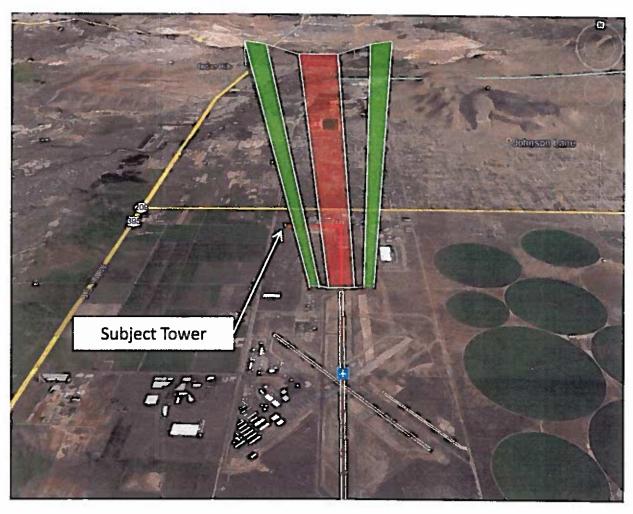
## 4. No Conflict Future LPV Approach



- •Subject Tower will **NOT** be located within the LPV Final Approach Segment.
- •The Decision Altitude (DA) of this procedure is design is 4958' MSL, Glide Slope of 3.0° and a TCH = 50 ft. These are the ideal minimums.
- •Final design will depend upon survey and design refinements.



## 4. No Conflict Future LPV Approach 3° Offset



- •Subject Tower will **NOT** be located within an LPV Final Approach Segment with a 3° Offset.
- •The Decision Altitude (DA) of this procedure is design is 4958' MSL, Glide Slope of 3.0° and a TCH = 50 ft. These are the ideal minimums.
- Final design will depend upon survey and design refinements.



# 4. No Conflict with Future LNAV/VNAV Flight Path

- FAA Order 8260.58, only allows a ±15° deviation from the Runway Centerline.
   The existing GPS-A deviation from the runway centerline is greater less than 15°. Therefore, an LNAV/VNAV procedure can take the same flight path.
- Same Final Approach Fix at "IVECI" was used.
- A Future LNAV/VNAV procedure can have the same foot print as the existing GPS-A procedure.
- The minimum HATh (Height Above Threshold), for an LNAV/VNAV procedure, is 250 feet. Therefore, the DA was set at 4958 feet MSL for a worst possible case condition. It should be noted that most LNAV/VNAV procedures seldom achieve 250 feet HATh.

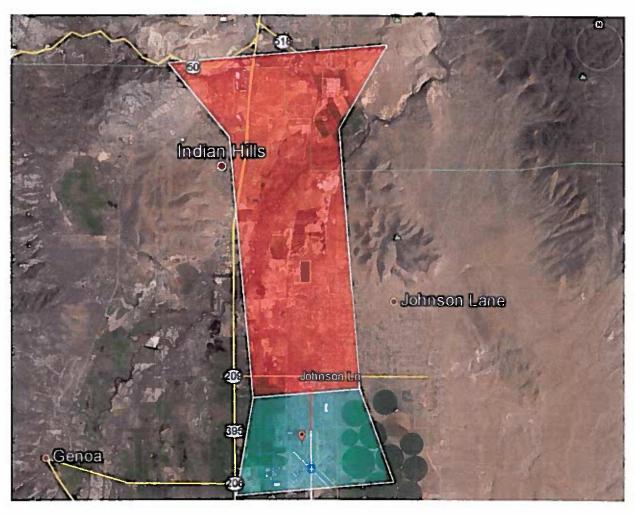


# 4. No Conflict with Future LNAV/VNAV Flight Path

- These conditions place the proposed tower between the DA point and the start of the Obstacle Clearance Surface (OCS). This is not within the area of where the OCS is active.
- Calculated LNAV/VNAV factors:
  - ACT: -24° C (From GPS-A Procedure)
  - D-origin: 3,816 feet
  - Docs: 5,898 feet
  - OCS: 23.403 to 1
  - Climb To: 12,000
  - FSL: 4797'
  - ARP Elevation: 4722' AMSL



## 4. No Conflict Future LNAV/VNAV Approach



- •Subject Tower will be located within the LNAV/VNAV Final Approach Segment with Offset.
- •The Decision Altitude (DA) of this procedure as design is 4958' MSL, Glide Slope of 3.0° and a TCH = 50 ft. These are the ideal minimums.
- •Final design will depend upon survey and design refinements. Allowable height is 4797' AMSL.



# Proposed Verizon Tower Will Not result in a Flight Pattern Change/Alteration From Existing Conditions

- Will <u>NOT</u> interfere in any way with Runway 16/34 or 12/30 departures.
- Will <u>NOT</u> cause a change in VFR Flight Patterns for Runways 16/34 or 12/30.
- Will <u>NOT</u> affect published MIDEN TWO DEPARTURE (RNAV)(OBSTACLE) Standard Instrument Departure.
- Will <u>NOT</u> affect any FAA published Take-Off Minimums.
- Does <u>NOT</u> cause any violation any FAA prescribed flight path.
- Will <u>NOT</u> Breach and Title 14, CFR Part 77 Obstruction Surfaces.
- Will <u>NOT</u> increase noise over Johnson Lane.
- Is compatible with a future Runway 16 LPV or LNAV/VNAV.

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Email: Airspace@AirspaceUSA.com



# Douglas County Planning Commission April 14, 2015

Request for a Special Use Permit

For a Solar Photovoltaic Facility as a Primary Use



## Title

For possible action. Discussion on Development Application (DA) 15-013, a Special Use Permit to construct and operate a commercial solar photovoltaic facility with associated power generating equipment on seven parcels totaling 260 acres. The subject property is located at 760 Muller Lane within the A-19 (Agriculture, nineteen-acre minimum net parcel size) zoning district and within the South Agriculture Community Plan (APNs 1319-24-000-008, -009, -011, 1319-13-000-008, -009, -010, and -011). The applicant is Derek Fromm, Greenstone Renewables, LLC. The Planning Commission may approve, approve with modifications or deny the request.

# Regulations w/ Supplemental Standards

20.664.260 Solar Photovoltaic Facility

A Solar Photovoltaic Facility as a principal use of land must meet the following standards:

- 1. The height of the solar photovoltaic unit may not exceed a height of 15 feet when measured from predevelopment grade.
- 2. The solar photovoltaic units must be setback a minimum of 100 feet from any lots adjacent to the subject property that are zoned residential.
- 3. The facility must comply with all Federal Aviation Administration requirements as applicable.
- 4. The site may not be illuminated at night with the exception of safety lighting required by the Uniform Building Code in effect at the time of construction.
- 5. Metal surfaces that are shiny must be painted with a non-glossy, earth tone color paint to blend with the desert landscape.
- 6. Solar photovoltaic units must utilize a film that is not reflective.
- 7. A fee to cover the cost of inspections associated with property maintenance must be paid at the time of building permit issuance.
- 8. If the facility is not used for 180 days to generate electricity, the system must be removed and the property restored to its original condition within 120 days. In accordance with the provisions of Section 20.720 of this Chapter, a security to ensure compliance with the terms of this requirement shall be posted at the time of building permit along with photographs of the site. The security will be released upon completion of the site restoration.
- 9. This minimum acreage to establish this use is 160 acres. The acreage may be comprised of contiguous properties, but may NOT be comprised of non-contiguous properties.

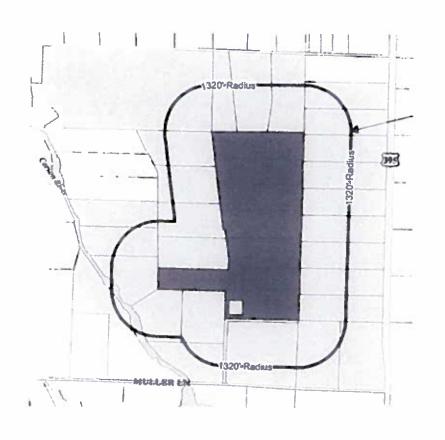
# Proposal

Utilize up to 260 acres to establish a utility-scale solar energy facility producing from 20 to 40 megawatts.

Project consists of access roads, solar panels, a tracking system, power inverters, transformers, a voltage collection system, a project substation, and a switching station.

Panels are proposed to be setback approximately 2,400 feet north of Muller Lane, 2,500 feet west of Hwy 395, 2,600 feet south of Genoa Lane and a minimum of 40 feet from side property lines, and a minimum of 100 feet from rear (northerly) property line.

# Public Input



The project was noticed in the newspaper, on-site, and in mailed notices. A not-for-profit group also placed its own ads in local newspapers.

Staff has received 57 emails and approximately 40 telephone calls regarding the proposed project.

# Public Input (Cont.)

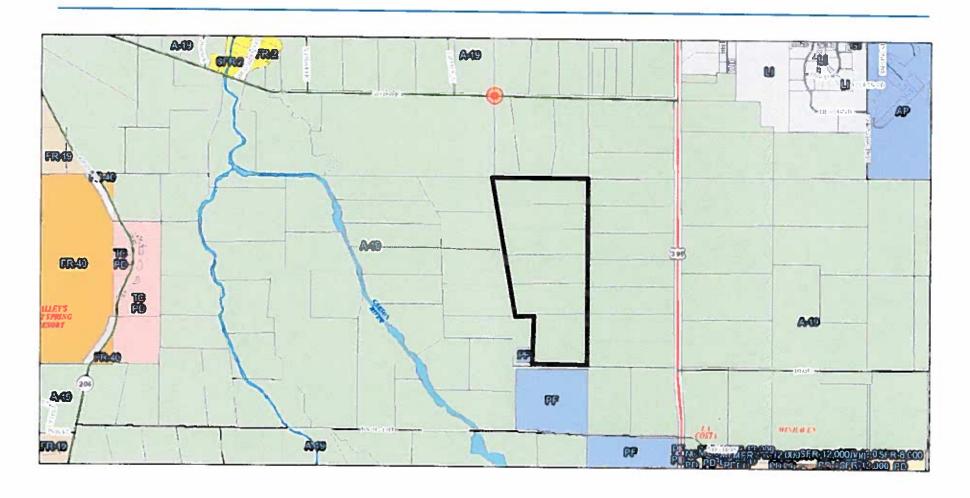
The most frequently cited concerns expressed by public include:

- Incompatible land use
- Aesthetics/Views
- Dust control and erosion control
- Loss of irrigated pastureland and wildlife habitat
- Noise
- Heat Generation
- · Potential for chemical pollution, leaching into groundwater

# Vicinity Map



# Zoning Map



# Findings for a Special Use Permit

- A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations.
- B. The proposed use is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include, but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both, to mitigate such impacts.
- C. The proposed use will not generate pedestrian or vehicular traffic that will be hazardous or conflict with the existing and anticipated traffic in the neighborhood.
- D. The proposed use incorporates roadway improvements, traffic control devices or mechanisms, or access restrictions to control traffic flow or divert traffic as needed to reduce or eliminate development impacts on surrounding neighborhood streets.
- E. The proposed use incorporates features to minimize adverse effects, including visual impacts and noise, of the proposed special use on adjacent properties.
- F. The project is not located within an identified archeological/cultural study area, as recognized by the county. If the project is located in a study area, an archeological resource reconnaissance has been performed on the site by a qualified archeologist and any identified resources have been avoided or mitigated to the extent possible per the findings in the report.
- G. The proposed special use complies with all additional standards imposed on it by the particular provisions of Chapter 20.604 (Special Use Permits) and all other requirements of Title 20 applicable to the proposed special use and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of Title 20.
- H. The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare; or result in material damage or prejudice to other property in the vicinity.

### Recommendation

Based on the ability to make the required findings, recommend approval subject to the following conditions.

- 1. The applicant/owner shall obtain written confirmation from the Minden-Gardnerville Sanitation District regarding the projects' impact, if any, to the existing effluent reuse agreement on the subject parcels.
- 2. The applicant/owner must apply for and obtain Design Review approval prior to applying for either a building permit or a site improvement permit.
- 3. The project must meet all provisions of Douglas County Code section 20.664.260, standards for a Solar Photovoltaic Facility.
- 4. The applicant/owner shall coordinate with Nevada Department of Transportation for an encroachment permit if any upgrade of access is required into the site.
- 5. The Design Review application must include a fencing detail and a lighting detail to ensure that both are consistent with the agricultural character of the area.
- 6. The Design Review application must be reviewed by the Water Conveyance Advisory Committee prior to applying for either a building permit or a site improvement permit.

## Recommendation (Cont.)

- 7. Landscaping between the photovoltaic facility and all property lines shall be maintained as irrigated farmland including native grasses and shrubs, and maintained in a weed-free condition. Additionally, a landscape buffer shall be planted with dense trees and native shrubs and groundcover along the northerly property line to lessen the visual impact for properties located north of the project site at 661 Genoa Lane.
- 8. The applicant/owner shall prepare and submit a detailed dust control plan to address dust control and wind erosion during construction and from interior access roads and from disturbed areas once the facility is operating.
- 9. The maximum noise level at the property line will not exceed 60 dBA at any time.
- 10. All access roads to and on the site shall be all weather accessible and have the capability to support a 50 ton load.
- 11. All internal access roads shall have a minimum surface area of no less than 12 feet wide, with 20 feet of clear space, and meet all turning radii subject to the standards set by the East Fork Fire District.
- 12. A Knox Box and Knox key shall be supplied at each locked access gate.

## Recommendation (Cont.)

- 13. All vegetation shall be managed through implementation of a Vegetation Management Plan to be submitted as part of the Design Review application and approved by the East Fork Fire District and the Community Development Director to eliminate the spread of wildfire through the solar farm and to reduce the possibility of fugitive dust, water and wind erosion of the topsoil.
- 14. A complete fire life safety plan/construction review shall be completed by the East Fork Fire District prior to the issuance of construction permits.

#### Papp, Emery

From:

Steve Walker <stevewalker@gbis.com>

Sent:

Monday, March 09, 2015 8:56 AM

To:

Papp, Emery; Moss, Mimi

Cc:

Chimarusti Esq Esq

Subject:

Letter to Planning Commission

Attachments:

Solar projectfinal.doc

Good Morning Emery - attached please find our letter requesting a denial by the Planning Commission concerning Agenda Item 15-013 - Photovoltaic Farm scheduled for tomorrow. We have received an email from the applicants implying they might ask to continue the item to a later meeting but we wanted to make sure if the item is not continued you would have time to submit to the Planning Commission Members -

Thank you Emery

Steve Walker 775-771-6323

#### Papp, Emery

From:

melwoodonly@aol.com

Sent:

Sunday, April 05, 2015 7:57 PM

To:

Papp, Emery

Subject:

Proposed Solar Industrial Electrical Plant

To the Douglas County Planning Commission:

Regarding the proposal by the Park Cattle Company and Greenstone Renewables, LLC., to place a solar industrial electrical plant on 260 acres of irrigated pastureland in the Valley between Genoa and Mulier Lanes.

The area between Muller Lane and Genoa Lane is zoned for A-19 - agricultural. I can't think of anything uglier to spoil our Carson Valley than this proposal. It won't even benefit the Carson Valley.

I would ask you to vote against this proposed development. It will be very visible on the drive down Kingsbury Grade which is the first impression of many tourists to our Valley.

Thank you.

Penelope Wright Gardnerville Resident From:

Mary Walker

To:

Moss, Mimi; Sullivan, Hope; Papp, Emery

Subject:

Walker Letter of Opposition to Greenstone Industrial Solar Plant Project

Date:

Monday, April 06, 2015 6:48:51 AM

Attachments:

PlanningCommissionLetterofOppositiontoGreenstoneProject.doc

Importance:

High

#### Good morning,

Please find attached the Walker letter of opposition to the Greenstone Industrial Solar Plant Project.

Steve will be dropping off agenda packets for you early this morning. We copied the letter and the many attachments which had maps and Alpine Decree Water Right information, etc.

Thank you for considering our request for denial.

Please let us know if you have any questions.

Mary 775-771-5964

Steve

775-771-6323



#### Walker & Associates

661 Genoa Lane, Minden, Nevada 89423

MEMO TO: Douglas County Planning Commission

FROM: Steve and Mary Walker

DATE: April 6, 2015

RE: Greenstone and Park Cattle Company Application for Special Use Permit for

Solar Industrial Plant between Muller Lane and Genoa Lane

#### Introduction:

Steve and Mary Walker, residents of 661 Genoa Lane, Minden, Nevada requests the Douglas County Planning Commission deny the Development Application, File Number DA 15-013, being heard at the Planning Commission meeting on April 14, 2015 and requests the Planning Commission revisit the ordinance allowing solar industrial plants on A-19 pastureland.

The request for denial is based on the following;

#### 20.604.060 Findings

When considering applications for a special use permit, the commission or board, where applicable, must evaluate the impact of the special use on and its compatibility with surrounding properties and neighborhoods to ensure the appropriateness of the use at a particular location

The application to cover 240 acres of irrigated agriculture in the middle of Carson Valley with a solar industrial plant is not compatible with surrounding properties and neighborhoods because it places an industrial use in a pastoral setting. Replacing green fields with hundreds of acres of 15 foot shiny, metal photovoltaic panels surrounded by an 8 foot chain linked fence with 3 string barbed wire on top is not compatible with Carson Valley's beautiful green fields.

The residence currently most affected, besides future homes in the area, is the Walker residence located at 661 Genoa Lane directly on the northern boundary of the solar power plant. Residences who live in A-19 residential zoning expect to look over horse and cow pastures, meadows, agricultural uses and other houses to enjoy views of the mountains. People who live in the A-19 residential zoning district expect that the district will be residential and agricultural. They expect to live in a quiet, country setting. A field of thousands of 15 foot high shiny metal solar panels with an 8 foot chain link fence with 3 strings of barbed wire on the top is not consistent with the purpose of the zoning district. It is an incompatible use.

Fax: (775) 782-4552

Phone: (775) 782-4465 marywalker@gbis.com

This is what the Greenstone Project will look like per their application.





Example of 15 foot industrial solar panels proposed to be placed on irrigated pastureland.

This is not compatible with the agricultural and residential neighborhood. It is an incompatible land use and activity which will have negative impact on residential living environments.

Policy 2.4 of the Land Use Element of the Master Plan states Douglas County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have negative impact on residential living

environments. Allowing a Solar Photovoltaic Facility in the A-19 residential and agricultural zoning district is an incompatible use.

There is currently only one residence on the boundary of the project. Chapter 20.604.060 does not differentiate whether the chapter applies to 1 residential property or 100. The Chapter is for ALL properties. The Chapter does not discriminate against one property or another. It is established to protect ALL residential properties in the vicinity.

20.604.060 H. The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare, and will not result in material damage or prejudice to other property in the vicinity.

The Applicant has NOT met this finding. The Applicant states by merely adhering to the limited requirements of Section 20.668.260 Solar Photovoltaic Facility (including having a height of the solar photovoltaic unit not to exceed a height of 15 feet) the project will not result in material damage or prejudice to other property in the vicinity.

This is clearly wrong for the following reasons:

Residential Property Devaluation. The special use will result in material damage and prejudice to every residential home and residential housing site in the area. The existing residence currently most affected, besides surrounding A-19 residential lots, is the Walker residence located at 661 Genoa Lane directly on the northern boundary of the solar power plant. Residences who live in A-19 zoning expect to look over horse and cow pastures, meadows, agricultural uses and other houses to enjoy views of the mountains. People who live in the A-19 zoning district expect that the district will be residential and agricultural. A field of thousands of 15 foot high shiny metal solar panels with an 8 foot chain link fence with 3 strings of barbed wire on the top is not consistent with the purpose of the zoning district. It is an incompatible use.

The Walkers spoke to appraisers to try to define specifically the devaluation of their home if the proposed solar industrial plant were to be approved. Appraisers are not able to give an appraisal for a future development. However, ask yourself a question:

If you had two residential properties you were looking to buy and one had a 260 acre solar industrial plant with 8 foot high chain linked fences with 3 barbed wire on the top surrounding it and another property which looked out onto a lovely green field, which one would you take? The one with the lovely green field, of course. That means the project would materially damage the value of the property.

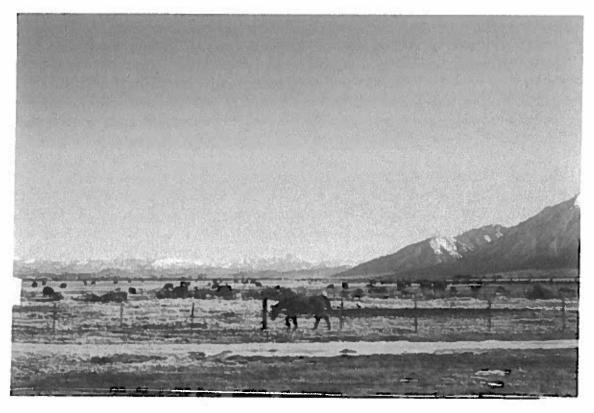
The Walkers have worked for almost 40 years for retirement. Their residence at 661 Genoa Lane was part of that retirement income since they would downsize and sell the property and live off the proceeds from the sale, as well other investments. The Greenstone solar industrial plant could mean the Walkers would not be able to ever sell their property. Their retirement income from the sale of their property they were relying on would be gone.

The Greenstone solar industrial plant will ruin the Walker's residence, their retirement income, their children's inheritance and their grandchildren's inheritance.

The Walkers would incur material damage due to this project.

There is currently only one residence on the boundary of the project. Chapter 20.604.060 H does not differentiate whether the material damage to other property is 1 property or 100. The Chapter is for ALL properties. The Chapter does not discriminate against one property or another. It is established to protect ALL properties in the vicinity.

Here is the current summer view from the Walker residence looking out onto the project area:



The existing ranch land is a cattle operation as you can see cattle grazing in the picture above. The applicant – Greenstone Renewables LLC, on page  $3-6^{th}$  bullet – of their application states: "Be located on land of low agricultural value, poor soil conditions and a limited history of productive agricultural activities."

The Douglas County Planning Department Staff Report dated 3/10/15 states -

"The site is currently vacant and covered with native grass and sagebrush. The project area is considered to have low agricultural value due to poor soils."

As one can see by the attached Carson River Decree map, the recent photo showing active irrigation, the Douglas County Soils Map and photos of active agricultural use that these statements are not valid.

- 80% of the site is irrigated and producing pasture grasses. The soils map show approximately 50% of the area is within a Soils Capability Class of 3-W. The best soils in Carson Valley are Capability Class 2. \* A portion of the area estimated at 20% see delineation on recent Google Photo does have soil limitation and is not effectively irrigated. The area is dominated by Black Greasewood and Green Rabbit Brush with an Inland Saltgrass understory. There is not a sagebrush within a mile of the site. The remaining areas vary in soil capability class ranging from Class 4w to Class 6W but all are irrigated and producing pasture grasses.
- The same limited soils Capability Class 6-W were within the last decade leveled and
  put into border irrigation on the south end of the property adjacent to the MGSD
  reclaimed water storage ponds see attached soils map/2014 Google Map.
- The Alpine Decree Water Rights appurtenant to the property Claims 428, 429 and 432 have priority dates of 1858, 1895 and 1870 respectively See Carson River Decree attached map. A recent investigation into the status of these rights indicates the point of diversion or place of use has not been moved since they were established. (reference Eric Schadeck, Water Resource Specialist, Division of Water Resources 4/1/15)
- Based on a 9/16/2008 contract with Minden Gardnerville Sanitation District the Parks are allocated 375 acre feet per year from the reclaimed water reservoirs immediately adjacent and up-gradient to the 260 acre parcel. The contract expires in 2077. (Reference Walker & Associates report to the Carson Water Subconservancy District on uses of reclaimed water in Carson River Watershed)
- Based on an Agricultural Economic Evaluation of the 260 acre property by Steve Walker, the revenue Park Cattle Company generates from the proposed site is approximately \$85,000 per year. It is an active, productive agricultural ranch. (See attached analysis)

Land irrigated since 1859 does not quite fit the description of "limited history of agricultural activities". Pastureland with two source of irrigated surface water, one source adjacent to the irrigated pasture, is very rare in Carson Valley. The area is irrigated frequently due to these two sources of surface water. Steve and Mary Walker have lived within 200' from the north end of the property for 12 years and the tail water from the irrigation back up and created shallow ponds just south or our residence every irrigation, creating great migratory inland shorebird and duck habitat. The pictures provided show cows grazing irrigated pasture further proves that the area is typical Carson Valley irrigated pasture.

#### 20.604.060 Findings

When considering applications for a special use permit, the commission or board, where applicable, must evaluate the impact of the special use on and its compatibility with surrounding properties and neighborhoods to ensure the appropriateness of the use at a particular location

Below are our responses to the specific required findings.

A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations;

The proposal conflicts with the policies within the Master Plan from Chapter 7 – Agricultural Element as follows:

AG Policy 1.1 – Douglas County shall plan for the continuation of agriculture as a distinct and significant land use in the county.

Greenstone has failed to meet this policy. Replacing irrigated pasture in the middle of Carson Valley with 260 acres of 15-foot tall shiny metal solar panels does not support the "continuation of agriculture as a distinct and significant land use in the county. The proposal places an industrial use on irrigated agricultural land. How many compatible agricultural uses would require an 8-foot high chain link fence with 3 strands of barbed wire and DANGER signs surrounding the use? (Page 16 Greenstone Renewables application)

AG Policy 1.4 Douglas County should encourage the industries that preserve and promote environmental quality, or serve the local needs of our community.

Greenstone has failed to meet this policy. Replacing 260 acres of existing irrigated pasture with 260 acres of shiny, metal photovoltaic panels surrounded by a chain link security fence is not an effective way to "preserve and promote environmental quality". Currently due to frequent irrigations and a northern end road embankment, large areas of shallow water are created each irrigation. These ponded areas used extensively by migrating inland shore birds and ducks (see attached species list). The applicant has stated to Steve Walker that the power generated is to be transferred via the conveniently located sub-station to Liberty Energy that only locally serves California residents. This seems counter to the "or serve the local needs of our community" portion of the policy. (See attached Request for Proposal from Liberty Energy.)

AG Policy 2.2 Douglas County shall provide a range of compatible uses on the agricultural lands and means for agricultural property owners to obtain benefit from this land while achieving the public goal of agricultural preservation.

Greenstone has failed to meet this policy. How could an industrial use of stark, shiny metal structures that shade a large portion of a once productive irrigated pasture be a compatible use of agricultural properties? The very essence of ag land is to capture the sun's energy to create food. Can compatible use be defined as capturing the suns energy to provide power to out of state customers? Does conversion of irrigated pasture land in driest state in the union to solar panels contribute to "achieving the public goal of agricultural preservation?"

#### Chapter 2 - Land Use Element of Master Plan

LU Goal 2 -To retain the beauty, the natural setting and resources, and the rural/agricultural character of the county while providing opportunities for managed growth and development.

Greenstone has failed to meet this policy. One could very easily make the argument that to NOT "retain the beauty, the natural setting and resources, and the rural/agricultural character of the county..." that we convert the irrigated agricultural area of our valley to an industrial use characterized by the monotonous coverage of a sea of solar panels. This same practice could easily reduce the general appeal of our valley that fosters "managed growth and development."

Policy 2.2 - Douglas County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment.

Greenstone has failed to meet this policy. A-19 zoning allows for a residence on each 19 acre parcel and that residence should be allowed the same protection of any other residence "from encroachment of incompatible activities or land uses...." Implementation of this project will invariably reduce the value of the existing residence and reduce the value of lots surrounding the project. Approving the project does not provide "protection" but does definitely "have a negative impact on the residential living environment."

Residences who live in A-19 zoning expect to look over horse and cow pastures, meadows, agricultural uses and other houses to enjoy views of the mountains. People who live in the A-19 zoning district expect that the district will be residential and agricultural. A field of thousands of 15 foot high shiny metal solar panels with an 8 foot chain link fence with 3 strings of barbed wire on the top is not consistent with the purpose of the zoning district. It is an incompatible use.

#### North, Central and South Agriculture Community Plan

NCSA Goal 1 To preserve and enhance the existing scenic and resource character of the north, central and south agricultural communities.

The proposed project is not compatible with the Goal 1 of the North, Central and South Agricultural Community Plan Goals and Policies. The adjacent development is agriculture and a single family home. To put industrial use on agricultural land zoned for 19 acre homestead parcels does not meet Goal 1.

The proposed project does not comply with Chapter 7 of the Master Plan-Agricultural Element's Goal 1. The property being developed is productive agricultural land per the Soil Conservation District and the fact it has been irrigated with Alpine Decree Water Rights dating back to 1859. These water rights still remain on the property...they have NOT been transferred. The proposed project does not preserve the character and integrity of adjacent development (agricultural) and neighborhoods (A-19 homesites).

The Applicant states the property is a "treated wastewater disposal field." That is NOT CORRECT. This land has been irrigated with Alpine Decree Water Rights dating back to 1859. See water right map with Alpine Decree Claims 428, 429 & 432.

Regarding the project mitigating development related adverse impacts, the project has not mitigated the adverse impacts. Solar panel farms with power inverters and tracking panel systems emit a constant noise. As the panels rotate to follow the sun, at 150 feet away from the proposed project, the project consultant states we will have to listen to 60 decibels of noise 7 days a week, 365 days a year. With the prevailing winds blowing from the Solar Farm site to our homes, the noise will be constant

The visual impact of this proposed project is ugly. Our home looks out onto the project and can see the entire 260 acre field of metal panels. The solar panels are suppose to be non reflective, however, they are produce a glare.

Dust control and weed control is a serious problem. The Applicant does not address the dust control maintenance or weed control. With 97 miles per hour winds, the project will produce dust storms which will not be able to be controlled, a direct violation of the Master Plan and the State of Nevada Air Quality Board. This will cause serious problems to motorists on Hwy 395 just 1/2 mile away.

NCSA Policy 1.1 The County shall use its Master Plan and development regulations to maintain or enhance the existing rural and scenic character of the community.

Greenstone has failed to meet this policy. If this special use permit is denied the County will be adhering to this policy. The findings listed above from 3 different planning documents repeatedly make the case the project does not meet the goals of the Master Plan. Again, how

could placing 15 foot high metal shiny solar panels with an 8 foot fence with 3 barbed wire on top over 260 acres of irrigated agricultural lands "maintain or enhance the existing rural and scenic character of the community."

#### **20.604.060 Findings (cont)**

B. The proposed use is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include, but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both, to mitigate such impacts;

Greenstone has failed to meet this finding. The adjacent development is agricultural land and residential home sites. The applicant's response to the above requirement stated that just by merely following the basic requirements of the new ordinance (Ordinance No. 2014-1416) (which includes 15 foot high solar panel allowance), this finding is met. Furthermore the justification for not addressing any impacts the project might have on adjacent properties is rationalized by pointing out that "only one residential dwelling located within the 1,320 notification range". The applicant further states that "Therefore, the proposed Solar Farm conforms with and preserves the character and integrity of adjacent development and this finding can be made." How can an industrial Solar Farm with 15 foot shiny, metal solar panels with an 8 foot high chain linked fence with 3 strands of barbed wire around it "preserve the character and integrity" of the A-19 agricultural residential zoning? Additionally how could a 260-acre array of contiguous solar panels preserve the character and integrity of irrigated agriculture. Water and management preserve the integrity of the adjacent sites.

# E. The proposed development incorporates features to minimize adverse effects, including visual impacts, of the proposed development on adjacent properties.

Greenstone has failed to meet this finding. Nothing in the application addressed minimizing adverse affects to the properties adjacent to the site. There is only 1 residential property on the border of the project, but there are several A-19 parcels with future planned residential projects.

The development does not address the heat impacts of the heat emanating from the panels, sound impacts, dust impacts, or visual impacts, particularly driving down Kingsbury Grade, Hwy 395, Muller Lane and Genoa Lane. The pictures the application shows greatly minimizes the effect by only showing half the area impacted along 395 or showing a 5 foot height when they are clearly asking for a "not to exceed 15 feet height." The application and pictures also do not address the potential for an 8 foot high chain linked fence with 3 barbed wires on top which will look like a prison....not a beautiful green belt.

20.604.060 H. The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare, and will not result in material damage or prejudice to other property in the vicinity.

#### Materially detrimental to the public health, safety and welfare.

The Greenstone solar industrial plant is materially detrimental to the public health, safety and welfare of Douglas County residents. Per a study by the Lawrence Berkeley National Laboratory in Berkeley, California published in July, 2011, "we found the large-scale adoption of desert PV lead to significant local temperature increases (+.04 C) and regional changes in wind patterns."

It further stated "modifications to the surface albedo through the deployment of cool roofs and pavements (reflective materials) and photovoltaic arrays (low reflection) have the potential to change radiative forcing, surface temperatures and regional weather patterns...Due to the solar arrays, local and regional wind patterns within a 300 km radius were affected. Statistically significant but lower magnitude changes to temperature and radiation could be seen across the domain due to the introduction of the solar arrays."

Regarding the wind, the study stated "the solar arrays influence local and regional wind patterns and boundary layer height...Directly above the solar arrays there is an increase in the magnitude of the afternoon southwesterly winds. Directly downwind of the arrays the magnitude of the prevailing afternoon southwesterly winds is reduced. The temperature and wind differences are also associated with higher afternoon boundary layer heights (150-250 m increase) over the solar arrays. It is interesting to note that supplemental figure 5 shows the disturbance in wind patterns caused by the solar arrays shifts downwind after sunset and directly effects nighttime wind patterns over Nevada and Arizona up to 300 km from the solar arrays."

This disturbance in wind patterns will affect airplane and glider flights over the valley potentially causing disruptive and unforseen wind patterns in flight.

The increase in the magnitude of the afternoon southwesterly winds is very problematic. Any valley resident knows the middle of the valley receives some of the greatest wind speeds in the valley. At times it nears 100 miles per hour. And now we would have a solar industrial plant increasing the magnitude of these winds? Would Carson Valley have a Washoe Valley effect now on Hwy 395 next to the solar industrial plant with winds so dangerous they knock over semi trucks?

These high winds also bring debris which can damage the solar panels which could have the potential to leach heavy metals and other toxins into the environment. In a University of Texas, Austin study by Amy Gao, they found "photovoltaic systems have the potential to leach heavy metals and other toxins from newly installed, broken or aged modules...Exposure to heavy metals, such as cadmium, leached from solar panels has been found to disrupt the respiratory system in rats, mice, monkeys, rabbits and hamsters (Fthenakis et al., 1999). The study also found while "none of the metals that leached from the newly installed thin film solar panel exceeded USEPA recommended limits for non-potable water reuse, in either cases of long-term

or short-term usage. Therefore, rainwater can be harvested from solar panels for non-potable uses, such as irrigation. However, once again, it is important to note here that these results are obtained from a newly installed solar panel. Higher concentrations of leached metals may occur as the solar panel is weathered and ages with time."

Regarding potable uses the study states "the significance of this project is solar panels installed on rooftops can become a source of metal contaminants for rainwater harvesting systems installed in the same residential household. Results indicate that harvested rainwater from a newly installed amorphous silicon thin film solar panel suggest that the concentrations of cadmium and lead might be elevated for potable uses. Nonetheless, these water quality indicators of harvested rainwater from a solar panel may change as the solar panel undergoes weathering and aging."

This brings another question of what happens to the birds and wildlife which may drink water contaminated by the solar panels? The leached metals could affect their respiratory system as is stated in the studies above. This is detrimental to the health of the birds and wildlife in Carson Valley.

Regarding the potential for Carson Valley mid-valley gale force winds damaging the solar panels, it's important to note solar panels are made out of silicon. If people inhale silicon dust over long periods of time, they can develop a disease called silicosis. This happens because silicon dust damages lung tissue, making lung capacity smaller and impeding breathing. The disease develops very slowly and there is no known treatment.

Regarding the noise level proposed in the application, the applicant states "Chapter 8.04 of the Douglas County Code Title 8 requires that noise generated from an EDNA Class C property to an EDNA Class A property should not exceed a maximum permissible noise level of 60 dBA at the property boundary of the receiving property or anywhere within...the sound emissions from the solar farm from the tracking mechanism will not exceed 60 dBA limit set in the Douglas County Nevada Code."

We do not believe this is correct. The Walker residence currently enjoys a quiet, silent atmosphere due to the prevailing winds blowing traffic noise away from the residents. You cannot hear the highway from the Walker residence because of this. The application for the solar industrial plant will create much more noise than the application refers to because the prevailing winds from the south will now blow right into the Walker residence bringing higher levels of noise than is being stated in the application.

Therefore, the Greenstone solar industrial plant special use application does NOT meet the findings of 20.604.060 H requiring the special use will NOT be materially detrimental to the public health, safety, convenience and welfare, and will NOT result in material damage or prejudice to other property in the vicinity.

# Intent of Ordinance Number 2014-1416 – Allowing Photovoltaic Farms on A-19 Zoning via Special Use Permit Application

Based on the minutes of the July 8<sup>th</sup>, 2014 Planning Commission and August 7<sup>th</sup>, 2014 Board of County Committee meetings concerning the review of the Ordinance # 2014-1416, the discussion included a reference to allow use on unproductive and/or fallow ag lands only with a Special Use Permit. Although the ordinance did not address restricting the use to only unproductive land, the inference was made as implied by the examples of the discussion with in the minutes and the Greenstone's Renewable's application. Examples of the discussion include:

"Ms. Sullivan believes her job is to protect the ag land and after reading the Master Plan and meeting with the Ag Association, there are circumstances where the ag land is nonproductive. Member Miner thought unproductive ag land needed to be rezoned."

"Matt McKinney, Bentley Ranches, said solar panels will not take over the irrigated land. Solar does not pay what farming or cows pay per acre at this time. The middle of the valley will not be covered by solar panels."

## Staff Report and Recommendations - Response below is to the Staff Report dated 3-1-2015

# Condition #7 – Page 2- Landscaping between the photovoltaic facility and all property lines shall be maintained as the native sagebrush desert

The condition will be impossible to comply with as there is not a sagebrush (Artemisia tridentata) within a mile of the property. The shrubby area on the central west side of the 240 acre parcel, occupying possibly 20% of the parcel (see attached 2014 Google Earth photo) is comprised of Green Rabbitbrush (Chrysothamnus vicidiflorus) and Black Greasewood (Sarcobatus vermiculatus) with an Inland saltgrass (Distichlis spicata) understory. These shrubs are commonly referred to as phreatophytes as they have deep roots that extend to the water table. In order to comply with the condition the applicant would have to quit irrigating, somehow lower the soil salinity, eradicate existing pasture grasses – both native and introduced – and plant sagebrush seed.

#### Top of page 3 - Regarding Public Comment

The homeowner has since this was written has had several meetings with staff, including the Assistant Planning Director and the Planning Director to express are concerns and communicate we adamantly oppose the project. Staff was provided the referenced maps on soils, irrigation and water rights. We also provided a letter to the Planning Commission date March 8<sup>th</sup>, 2015 expressing are concerns and asking for denial of the project.

Second complete paragraph of staff report—page 4 — "The site is currently vacant and covered with native grass and sagebrush. The project area is considered to have low agricultural value due to poor soils."

Staff is simply mimicking the statement made by the applicant – see page 12 of this memo. Summarizing the data presented the area is approximately 20% shrub dominated, has over 50% of the area as Class 3 soils, the south end is leveled and uses border irrigation. There is not a sagebrush within a mile of the site and the herbaceous vegetation (grasses and forbs) is made up of a variety of introduced and native species. Additionally the area has two sources of surface irrigation water including a portion with a 1859 Alpine Decree water right (Claim 428) and is frequently irrigated as depicted on the April, 2014 Google earth map.

Thank you for considering our request to deny the special use permit for the Greenstone Solar Industrial Plant to be located on productive, irrigated pastureland in the heart of Carson Valley!

From:

Mary Walker <marywalker@gbis.com>

Sent:

Monday, April 06, 2015 6:53 AM

To:

Mary Walker; Moss, Mimi; Sullivan, Hope; Papp, Emery

**Subject:** 

Re: Walker Letter of Opposition to Greenstone Industrial Solar Plant Project

Sorry, one last point of clarification. Emory said in his staff report that the solar plant site is vacant land. It's only vacant in the winter as is most of the other cattle pasturelands. This is because in the winter, the cattle are taken elsewhere such as California, Yerington or Fallon, etc. Then in the Spring, when the grass gets green, the cattle are moved back to Carson Valley. You will start to see the cattle return to Carson Valley in about 2 weeks.

Just wanted to put that on record.

Thanks much, Mary

---- Original Message -----

From: Mary Walker

To: Mimi Moss; H Sullivan; epapp@co.douglas.nv.us

Sent: Monday, April 06, 2015 6:49 AM

Subject: Walker Letter of Opposition to Greenstone Industrial Solar Plant Project

Good morning,

Please find attached the Walker letter of opposition to the Greenstone Industrial Solar Plant Project.

Steve will be dropping off agenda packets for you early this morning. We copied the letter and the many attachments which had maps and Alpine Decree Water Right information, etc.

Thank you for considering our request for denial.

Please let us know if you have any questions.

Mary 775-771-5964

Steve

775-771-6323

Date:

April 6, 2015

To:

**Douglas County Planning Commission** 

From:

William Kugler and Sue Coffey

Subject:

Agenda Item (DA) 15-013-Photovoltaic Farm Application

We are writing this to show our great concern that Douglas County is even hearing an application for a 260 acre Solar Farm between Muller and Genoa Lane in the heart of our valley.

We are proponents of green energy, but not when it 1) destroys our pastoral scenery we all cherish and is a gift to all who live and travel here 2) destroys the value of our citizens homes and land 3) creates hazardous conditions in the valley and roads with potentially blowing debris 4) is built on irrigated pastureland, destroying habitat and creating a precedent where any one of us could be subjected to this type of inappropriate and incompatible industrial use in our own back yards.

And, to make matters worse, this project brings absolutely no benefit to Douglas County-whatsoever. It is offensive that the applicants feel they can ruin our valley while benefiting Lake Tahoe, Ca. It feels to us like we are being dumped on.

Our citizens and local government have fought hard to keep our valley verdant and beautiful. Good and beneficial growth was fought against in an effort to leave the pasture fields as they are, especially along the 395 corridor and the corner of Mulier/395. And now we are looking at a potential industrial solar field of almost 300 acres potentially being built there? At least a shopping complex, equestrian center and good planned development would have been beneficial to our citizens. If we allow this type of industrial use on pastureland, we are going against everything we fought for. Additionally, if approved, it would set a precedent that an industrial use of this nature could be placed anywhere and our quality of life and property values could plummet. That's a scary thought. When we were looking for pictures of what a 300 acre solar farm looks like, which is ghastly, we found it was rare they were placed anywhere near a home or close to a highway! The Walkers will lose a great amount because they would lose the value of their home and property. To throw two of our citizens into that scenario would be unconscionable.

If we are going to approve a solar field, it should be to service our community and it should be placed out by the fairgrounds on leased BLM land where it will not harm anyone, destroy property values or our pastoral valley. The proposed location has less sunlight per day compared to out east of the valley.

We also question how safe this project would be. There have been some places in the valley where the wind has reached close to 125 mph. If there is blowing debri or panels, it will be blown into 395 and into the Walkers home. We've had horses injured/killed and buildings/trees/poles blown down or destroyed. Once built, the destruction of the plants and grasses would cause major dust storms across

the highway causing potentially severe hazard problems. This is probably not a good location for this project.

We take Muller Lane frequently and enjoy the migrating birds, eagles and hawks. If those pastures are destroyed for metal panels we would not be good stewards of our lands or caretakers of our wild birds and animals. We enjoy a certain quality of life in Douglas County and this could result in a slippery slope. Let's not forget who we are and what we treasure here.

We strongly request you consider denying this application for the solar farm at this location – or any location in Douglas County unless it is going to benefit our citizens and is located in an appropriate area.

Thank you

Sue Coffey and William Kugler

790 Eagle Meadows Lane

Gardnerville, Nevada 89460

775-450-8461

From:

coffey10@aol.com

Sent:

Monday, April 06, 2015 12:19 PM

To:

Papp, Emery

Subject:

(DA) 15-013 solar photovoltaic farm

**Attachments:** 

**Douglas County Commissioners.docx** 

Pls. find attached our letter in opposition to the solar farm.

Thank you

Sue Coffey and William Kugler

From:

timannnev@aol.com

Sent:

Tuesday, April 07, 2015 11:47 AM

To:

Papp, Emery

Subject:

solar farm

My husband and I agree whole-heartedly, that Carson Valley would be disturbingly and disgustingly diminished by acres and acres of 15' high solar panels. We moved here 17 years ago because of the scenic vistas, wonderful people, and the positive attitude toward environmental intelligence. We have supported the Eagles and Agriculture events, and routinely take our cameras out to capture images of the spectacular natural surroundings that are now available to us. Without the pastures, streams, and brush in the middle of the valley, we would hardly be able to enjoy the sightings of various hawks, eagles, owls, coyotes, cattle and other assorted creatures. Without the clear, unbiemished landscape we would not appreciate the contrast of rugged mountains, trees, and incredible skies that are ours to view each day. Often, when driving down to the valley on the Kingsbury Grade, we stop to absorb the wonder of the vast, and magnificent sight before us. I don't think it would look the same if it was covered with the glaring reflections off of a "farm" of metal and plastic solar panels.

NO THANK YOU!

Teresa and John Manning

From:

Gary Williams <svreverie@charter.net>

Sent:

Tuesday, April 07, 2015 11:38 AM

To:

Papp, Emery

Subject:

Solar farm

if there is a need for a solar farm in our valley there has to be a better place to put it. I know the owner would like it there for ease of access to the grid BUT let's preserve the beautiful corridor we have through our valley. Park Land and Livestock has adequate property in the sage brush to the east. We don't need to look like the solar farm at 4 Corners on 395 in California. Thanks for listening, Gary Williams, 1614 Mono Ave., Minden (48 year resident of Carson Valley)

From: Sent: Al Sheehan <aes1924@charter.net> Tuesday, April 07, 2015 8:10 AM

To:

Papp, Emery

Subject:

Solar Industrial Electrical Plant

Park Cattle Company and Greenstone Renewables, LLC should not be allowed to install Solar Panels especially in irrigated pastureland and the power sold to California. Such Solar array built in the dry foothills and the power used in Nevada would be another consideration. DO NOT APPROVE!

Alfred and Susan Sheehan 964 Parkview Court, Carson City, NV 89705 Douglas County Resident

From:

Joan Hall <joan@mail.nrhp.org>

Sent:

Monday, April 06, 2015 6:59 PM

To:

Papp, Emery

Subject:

Greenstone solar farm

As a 4th generation to call Carson Valley home, i urge you to deny this application. What a horrid blight on our beautiful valley this would be. Please oppose it.

Joan Summers Hall 657 Stonesthrow Rd Gardnerville, NV

Joan S. Hall President/CEO NEVADA RURAL HOSPITAL PARTNERS 4600 Kietzke Lane 1-209 Reno, NV 89502

775-827-4770 (w) 775-721-8548 (c)

joan@nrhp.org

From:

Mary Walker <marywalker@gbis.com>

Sent:

Monday, April 06, 2015 6:49 AM

To:

Moss, Mimi; Sullivan, Hope; Papp, Emery

Subject:

Walker Letter of Opposition to Greenstone Industrial Solar Plant Project

**Attachments:** 

Planning Commission Letter of Opposition to Green stone Project. document to the project of th

Importance:

High

Good morning,

Please find attached the Walker letter of opposition to the Greenstone Industrial Solar Plant Project.

Steve will be dropping off agenda packets for you early this morning. We copied the letter and the many attachments which had maps and Alpine Decree Water Right information, etc.

Thank you for considering our request for denial.

Please let us know if you have any questions.

Mary 775-771-5964

Steve 775-771-6323

From:

Judy Williams <jcwminden@gmail.com>

Sent:

Tuesday, April 07, 2015 2:46 PM

To:

Papp, Emery

Subject:

Solar Farm Permit

As a longtime CV resident, I oppose the Greenstone Solar Farm Special Use Permit as proposed. I am not against a solar farm in the valley, but given the extent of Park property, it seems the farm could be located out of view of the majority of residents and travelers while retaining all the necessary features for optimal solar power.

We are uniquely blessed by the incredible view from the valley floor up to the majestic Sierra mountains and it should not be scarred by metal and glass. It is not in keeping with the Land Use Goal 2 of the Master Plan since the solar farm would not "retain the beauty, natural setting and resources and the rural agricultural character of the county" If located as the permit requests.

Thank you for your time.

Judy C. Williams 1614 Mono Ave. Minden

From:

5ylvia da Costa <sjdacos@yahoo.com>

Sent:

Wednesday, April 08, 2015 11:36 AM

To:

Papp, Emery

Subject:

Proposed Solar industrial plant

#### To Whom it may concern:

I will not be able to make the April 14th meeting regarding this development, but please take my extreme disapproval of this proposed industrial solar complex. I realize that Park Cattle Company probably have plenty of sway in Douglas County due to their ample ownership of ranch land here but please do not let our agricultural valley be turned into an industrial center to help California and the deep pockets of the uninvolved Greenstone Renewables company.

While I support solar energy whole-heartedly, these sites need to be placed away from habited areas. I've heard many times that the sites need to be near transmission lines but connectivity expenses should be born by the companies wanting to benefit financially by destroying such places as our Valley and where we live.

Sincerely, Sylvia da Costa 1172 Del Mesa Ct Minden, NV 89423 sidacos@yahoo.com

From:

Thomas F Riley <thomasfriley@sbcglobal.net>

Sent:

Wednesday, April 08, 2015 1:43 PM

To:

Papp, Emery

Cc:

savecarsonvalley@gmail.com

Subject:

**Proposed Solar Complex** 

I am sending this e-mail to object to the solar complex proposed by Park Land & Cattle Co. to be placed on the irrigated floor of the beautiful Carson Valley, was born in Carson City and raised in Minden, and still have relatives living in Gardnerville. I have been proud of the manner in which Douglas County has protected the natural Valley floor by directing most development to the foothill areas over the years.

I, as well as a great number of other local Nevadans and a considerable number of tourists, believe that Carson Valley is a scenic treasure and should stay that way in perpetuity. The proposed development is a direct affront to the decades of planning and care taken by Douglas County to assure the Valley floor remains free from commercial and industrial development.

A solar development of any size is an eyesore, but the location of the proposed project makes it a visual abomination. It is clear that Park Land & Cattle is so greedy they would destroy a 100 year-old scenic treasure for a quick buck. The proposed solar project should be denied, and the developer should be forced to put its tacky industrial project out in the desert.

Thomas F. Riley 6770 Sonterra Lane Reno, Nevada 89523

Phone 775-747-3220

From:

CindyHEssaff@aol.com

Sent:

Wednesday, April 08, 2015 4:59 PM

To:

Papp, Emery

Cc: Subject:

savecarsonvalley@gmail.com PLEASE! No Solar Farm in DC

#### **Dear Sirs and Madames:**

Please reconsider the plans to place a solar farm in beautiful Douglas County. If only to sell energy to California - why not have California add these solar panels to the existing hill sides covered already with wind turbines. I appreciate the use of solar panels but, on a house by house basis - not covering the valley floor of one of the last remaining beautiful sights in Northern Nevada.

I am a transplant from California and I saw first hand what progress did to the Valley of Santa Clara, Sunnyvale, San Jose etc., with the urban sprawl and strip malls on every corner. What was one of the most beautiful, flowering/fruit orchards is now covered in concrete and yes, parking lots!

My family actually moved from the Los Angeles county in 1950 to the Golita/Santa Barbara area because of the urban growth - then, that became too muchi Once it's gone...it's gone forever! NEVER will it be the same if we don't take a stand now and protect our valley.

i also realize that Park Cattle Company wants to expand it's operations but please, don't sell out for the sake of industrial use!

Sincerely,

**Cindy Hunter Essaff** 

From:

John Benzing <jbenzing@pyramid.net>

Sent:

Wednesday, April 08, 2015 5:28 PM

To:

Papp, Emery

Cc:

savecarsonvalley@gmail.com

Subject:

**Proposed Solar Power Plant** 

From information shown in the newspaper, I see that Park Cattie and Greenstone Renewables is proposing a large solar power plant on the west side of Highway 395 between Mueller Lane and Genoa Lane. The article says that the power to be produced is to be sold in California, not Nevadal It is totally inappropriate to place such a facility in our beautiful green valley! We overlook the valley and do not want to be looking down on shining mirrors in the middle of this beautiful valley. Why not have the developers go to California where they would be much closer to the end users and there are thousands of barren acres of flat land in the California Central Valley which are available, especially now that the large Ag growers cannot water all that arid land for crops. Most developers of large, commercial solar arrays decided long ago that the best location for such facilities is in remote locations, away from farms and residents.

Just say NO to this bad ideal

From:

Wolf Kohz <wolf@wolf-products.com>

Sent:

Wednesday, April 08, 2015 7:28 PM

To: Cc:

Sullivan, Hope Papp, Emery

Subject:

Greenstone Solar Farm

Please be advised that we (52 year residents of Douglas County) oppose granting special use permit to referenced entity!

Judith Kohz

Wolfgang Kohz

1163 Casa Blanca Court

Minden, NV 89423

(775) 267-9890

From:

gailteig@aol.com

Sent:

Thursday, April 09, 2015 3:08 PM

To:

Sullivan, Hope; Papp, Emery

Subject:

Solar project

To whom it may concern:

What are you thinking?

While I believe that property owners have some discretion with their property and its use, the zoning is a guide that should not be taken lightly. This project goes way beyond the intended agricultural use or zoning. On top of that, the scope is incredibly over the top. Over 200 acres of approved solar panels in our valley which so many are working so hard to keep "green" and functioning as intended.....in agriculture.

The approval of such a project would set a dangerous and foreboding precedent. While some wouldn't blame a struggling agricultural operation from "selling out" to California interests, there are reasons for our zoning and restrictions therein. If this project is approved, others will follow. California is hungry for our resources, be they solar power, wind power, or water rights. Nevada is close by. Nevada is wide open. Nevada might be vulnerable. Let's hope Douglas County is not.

Send a message and deny this project. Since this isn't the first project of its kind, let's assume it won't be the last. In the meantime, there should be a study and some limitations put in place. Keep these panels from overpowering what nature has given us here in the Carson Valley.....pristine grazing and habitat country. Nevada has plenty of wide open spaces, perfectly suited for developing solar power on this scale. Go there.

A study should take into consideration the beautiful view shed that our pasture lands provide. It should recognize the rights of neighbors and keep solar projects from interfering with others. It should also question the value of using our agricultural properties for the benefit of neighboring states. County officials should also recognize that there are historical prerogatives at work in our community. Taking away any agricultural acreage goes beyond the landowner themselves. It diminishes the uniquely special characteristics of our valley.

Respectfully submitted,

Gail Teig, Owner Van Sickle Station Ranch

From:

Sullivan, Hope

Sent:

Thursday, April 09, 2015 4:58 PM

To:

Papp, Emery

Subject:

FW: SPECIAL USE PERMIT FOR THE GREENSTONE SOLAR FARM

Copy to file, PC, copies for public at meeting.

From: <a href="mailto:guy.proto@charter.net">guy.proto@charter.net</a>]

Sent: Thursday, April 09, 2015 4:57 PM

To: Sullivan, Hope

Subject: SPECIAL USE PERMIT FOR THE GREENSTONE SOLAR FARM

# This e-mail is to inform you that as a Douglas County Resident I am <a href="OPPOSED">OPPOSED</a> to the special use permit for the GreenSstone Solar Farm. This project violates all of the following and would be an absolute disaster for to the beauty of this valley:

#### 20,604,060 Findings for a Special Use Permit

When considering applications for a special use permit, the commission or board, where applicable, must evaluate the impact of the special use on and its compatibility with surrounding properties and neighborhoods to ensure the appropriateness of the use at a particular location and make the following findings:

20.604.060 A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations;

20.604.060 B. The proposed use is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include, but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both, to mitigate such impacts;

20.604.060 E. The proposed use incorporates features to minimize adverse effects, including visual impacts and noise, of the proposed special use on adjacent properties:

20.604.060 G. The proposed special use complies with all additional standards imposed on it by the particular provisions of this chapter and all other requirements of this title applicable to the proposed special use and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of this title; and

20.604.060 H. The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare, and will not result in material damage or prejudice to other property in the vicinity. (Ord 1319, 2010; Ord. 801, 1997; Ord. 763, 1996; Ord. 295, 1978; Ord. 167, 1968)

#### Chapter 7 - Agricultural Element of Master Plan

AG Policy 1.1 – Douglas County shall plan for the continuation of agriculture as a distinct and significant land use In the county.

AG Policy 1.4 Douglas County should encourage the industries that preserve and promote environmental quality, or serve the local needs of our community

AG Policy 2.2 Douglas County shall provide a range of compatible uses on the agricultural lands and means for agricultural property owners to obtain benefit from this land while achieving the public goal of agricultural preservation

#### Chapter 2 - Land Use Element of Master Plan

Land Use Goal 2 -To retain the beauty, the natural setting and resources, and the rural/agricultural character of the county while providing opportunities for managed growth and development

Land use Policy 2.2 - Douglas County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment

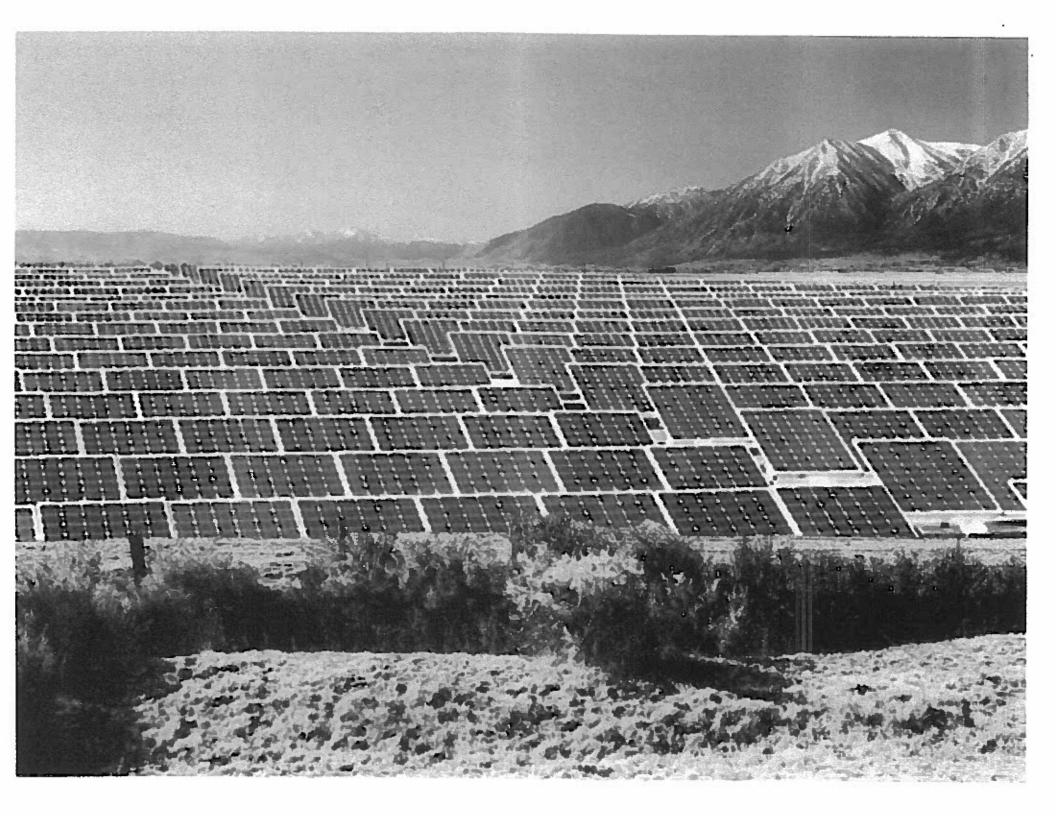
NCSA Goal 1 To preserve and enhance the existing scenic and resource character of the north, central and south agricultural communities.

NCSA Policy 1.1 The County shall use its Master Plan and development regulations to maintain or enhance the existing rural and scenic character of the community.

If you ned to reach me I my contact info is:

Guy Proto 1251 N. Santa Barbara Dr Minden, Nv 89423

Home: (775) 392-2175 Ceil: (775) 781-3141



From:

Mary Walker < marywalker@gbis.com>

Sent:

Friday, April 10, 2015 6:51 AM

To:

Moss, Mimi; Sullivan, Hope; Papp, Emery

Subject:

Additional Information for Greenstone Industrial Solar Farm Project Hearing

**Attachments:** 

Solar Farm overlay.tiff

Importance:

High

Good morning,

Steve and I hired a local photographer to take a picture of the Greenstone Industrial Solar Farm site and overlay it with solar panets in order to visualize the incompatibility of the use to allow solar panets on Carson Valley irrigated pastureland. Please see attached.

If you could please provide this as additional information for the agenda packet for Tuesday, I would appreciate it.

Thank you, Mary

From:

bob marsh <bd140787@gmail.com>

Sent:

Friday, April 10, 2015 10:25 AM

To:

Papp, Emery

Subject:

Solar Project at Muller & Genoa

Mr Papp,

Concerning this solar project by Park & Greenstone LLC. We have conversed with Mr. Rutledge at Greenstone LLC and we have reached out to the Walker family (aka "Save Carson Valley Coalition") concerning this proposed project. We have not, as yet, received any response from the Coalition.

We have concluded that we are in overwhelming support of the county proceeding with the above project. We will attempt to attend the upcoming meeting to lend our voice of support.

Thank you for your forward thinking,

bob & LeAnn Marsh Gardnerville, nv

From:

Sullivan, Hope

Sent:

Friday, April 10, 2015 10:52 AM

To:

Papp, Emery

Subject:

Fwd: solar

Copy like others.

Sent from my iPhone

Begin forwarded message:

From: Anje de Knijf <adeknijf@gmail.com>
Date: April 10, 2015 at 10:06:21 AM PDT

To: "Sullivan, Hope" < HSullivan@douglasnv.us>

Subject: Fwd: solar

# Hi Hope, Here's another email I received. Please forward to other commission members. Thanks so much! Anje

----- Forwarded message -----

From: dick clark < dclark 1940@gmail.com>

Date: Thu, Apr 9, 2015 at 10:08 AM

Subject: solar

To: adeknijf@gmail.com

Solar is to lower the use of fossil fuels. So that's a good thing. There is lots of good area in BLM controlled land. Using fertile farm / ranch land like Harry Reed tried in Southern Nevada. That land and this land should be used to feed America. Thanks Dick Clark 656 Stonesthrow rd Gardnerville I have lived here 47 years

Anje de Knijf, Broker/Salesperson

Sierra Sotheby's

INTERNATIONAL REALITY

anje.deknijf@sothebysrealty.com sierrasothebysrealty.com

210 Elks Point Rd. Suite 102 | PO Box 1370 | Zephyr Cove NV | 89448 m 775.721.5229 | t 775-588-7710 | 888.444.1505

From:

Dixie Gee <dixieag@outlook.com>

Sent:

Friday, April 10, 2015 3:07 PM

To: Subject: Papp, Emery solar plant

SAVE OUR BEAUTIFUL VALLEY Do Not build solar plants on cultivated land to provide electric power to California i Let California build their own solar plants. Dixle gee, 5 month resident of Yerington, ex-California resident.

From:

Sullivan, Hope

Sent:

Monday, April 13, 2015 8:15 AM

To:

Papp, Emery

Subject:

FW: DA 15-013 (Solar Farm)

Public correspondence re: solar.

From: McDermid, Nancy

Sent: 5aturday, April 11, 2015 3:27 PM

To: Sullivan, Hope

Cc: tacotham@gmail.com; Nichols, Jlm Subject: Fwd: DA 15-013 (Solar Farm)

Hi, Hope.

I am forwarding this email to you so you can have it read into the record at the Panning Commission meeting for the item on this Solar Farm.

Very best,

Nancy

Nancy McDermid
Douglas County Commissioner

Sent from my iPhone

Begin forwarded message:

From: Teri Cotham < tacotham@gmail.com > Date: April 10, 2015 at 5:12:42 PM PDT

To: <glynn@co.douglas.nv.us>, <sthaler@co.douglas.nv.us>, <nmcdcrmid@co.douglas.nv.us>,

<dougniohnson(\alpha\charter.net>, <wpenzel(\alpha\co.douglas.nv.us>)

Subject: DA 15-013 (Solar Farm)

Dear Douglas County Commissioner:

We are writing to ask you to <u>deny</u> a Special Use Permit to Derek Fromm, Greenstone Renewables. If they want to put up 270 acres of solar panels to generate electricity, let them do that out in the Pinenuts, not in the Carson Valley. When we drive along Highway 395, we love to see the pastures, cattle, horses and beautiful birds who live there. The view of 260 (TWO HUNDRED AND SIXTY) <u>ACRES</u> of solar panels will ruin that peaceful tableau. It will turn visitors off to the once-bucolic Minden/Gardnerville area and that will lower all of our property values.

Please vote NO to this intrusion on our peaceful valley.

Respectfully,

/s/

Ray and Teri Cotham

Gardnerville, NV 89410

From: Mary Walker <marywalker@gbis.com>

**Sent:** Saturday, April 11, 2015 10:26 AM

To: Moss, Mimi; Sullivan, Hope; Margaret Pross; James Madsen; Anje de Knijf; Jo Etta Brown;

James Beattie; Frank Godecke; Papp, Emery; Kevin Servatius

Subject: Walker Home was Site of 3 National Interviews

#### Good morning.

We have additional information for you regarding the Greenstone Solar Industrial Plant project. As you are aware, our home is on the northern boundary of the Industrial Plant Project. But, it was also the site of 3 national television interviews over the past 11 months.

On a nice Spring evening in May, 2014, Steve and I were sitting in our backyard looking out onto the pastureland and Jobs Peak having a glass of wine before dinner when a big, black car drove up our Lane to our house. The gentleman driving the car was David Picker, Producer out of New York with NBC Sports. Please see emails below. He said he had been driving around Carson Valley for the past 2 days and was looking for a site to film an interview with Steve Coburn, co-owner of California Chrome. This was right after Chrome won both the Kentucky Derby and the Preakness.

David asked us if they could film the interview here at our home outside looking over the green meadows and mountains. We said "of course." The next day, the film crew came out with Steve Coburn and they spent the morning setting up and interviewing Steve Coburn. They used our old wood pile and turned over a rusty metal horse trough for Steve to sit on. It was great. The film crew and David couldn't believe how beautiful our valley was and what a wonderful spot our home was located in.

In October, David called again and asked if they could do another interview. We were in Hawaii celebrating my 60th birthday and said "of course, it would be an honor." We called our house sitter and told her they were coming out. They used our livingroom with the big picture windows looking out towards the beautiful green fields and the snow capped mountains.

Then last week, we got a call from David again and he asked if they could do another interview with Coburn at our house and we again, said "of course." This time, they brought Josh Elliott, a TV star who just left the Good Morning America Show and is now working with NBC Sports. Josh loved the place. He kept saying he needed to get out of New York and come back to the West Coast where he was raised as he looked over our beautiful Carson Valley fields of green grass and snow capped mountains.

You can see the email string below. The producer, David Picker said in his email below "Josh Elliot was very impressed with the views you wake up to every day." Here is an article on Josh:

http://www.people.com/people/article/0\_20802453.00.html

We have every expectation they will be back again to film interviews with Steve Coburn. What are they going to find? A beautiful, peaceful setting which is a showplace on National TV or ugly industrial metal contaminating solar panels 15 feet high with a prison like fence 8 feet high with 3 string barbed wire around it?

Please don't destroy this beautiful valley. We are all caretakers.

Thank you for listening. Mary Walker 775-771-5964

---- Original Message -----

From: Picker, David (NBCUniversal)

To: Steve Walker

Cc: Mary Walker Walker

Sent: Friday, April 10, 2015 9:15 PM

Subject: RE: NBC Sports

Hi Steve. Yes, as soon as I'm back in NY next week I'll FedEx a copy of this piece to you. And I'll send a copy of the piece we just shot once it airs in early May.

Sorry for not reaching out to you first, just to say thanks again for letting us use your beautiful home for our Coburn Interview. Josh Elliott was very impressed with the views you wake up to every day. After our interview, we caught a plane to LA and have been shooting 15 hours a day. So it's continued to be very busy on this end. But that's horse season for you.

Best, Dave

#### **NBC SPORTS** GROUP

David Picker I Producer
1 Blachley Road
Stamford, CT 06902
W: (203) 356-2242 C: (347) 952-6052
David.Picker@nbcuni.com

From: Steve Walker [mailto:stevewalker@gbls.com]

Sent: Friday, April 10, 2015 7:26 PM To: Picker, David (NBCUniversal)

Cc: Mary Walker Walker Subject: Re: NBC Sports

Hi David - Hope everything went well last Wednesday. I need a favor of you. Could you supply the video of the Coburn interview you had out last year. Thanks

Steve Walker

On Apr 2, 2015, at 4:37 PM, Picker, David (NBCUniversal) wrote:

Got your message, Steve. Thanks for calling back. I will know tomorrow whether it's Wednesday (4/8) or Thursday (4/9). It's 50-50 at this point. Thanks for being flexible! I'll email again as soon as I know.

Have a nice night.

Dave

<image001.png>
David Picker | Producer
1 Blachley Road
Stamford, CT 06902
W: (203) 356-2242 C: (347) 952-6052
David.Picker@nbcuni.com

From: Picker, David (NBCUniversal)
Sent: Thursday, April 02, 2015 10:31 AM

To: 'stevewalker@gbis.com'

Subject: NBC Sports

Steve,

It was nice talking to you on the phone this morning. Thank you again for allowing us to film at your house. We really appreciate how generous you've been with us over the past year. I hope one of these days I can return the favor (beyond a few books and hats).

As I mentioned, we're going to be in town on Thursday, 4/9. And we're hoping to set up for the interview on the early side (perhaps 7:30-ish) and most likely outside (but perhaps inside). I will touch base with you early next week. If you have any questions in the meantime, please feel free to email or call anytime.

Looking forward to seeing you soon.

Best, Dave

<image001.png>
David Picker | Producer
1 Blachley Road
Stamford, CT 06902
W: (203) 356-2242 C: (347) 952-6052
David.Picker@nbcuni.com

From:

Mary Walker < marywalker@gbis.com>

Sent:

Saturday, April 11, 2015 10:55 AM

To:

Moss, Mimi; Sullivan, Hope; Margaret Pross; James Madsen; Anje de Knijf; Jo Etta Brown;

James Beattie; Frank Godecke; Papp, Emery; Kevin Servatius

Cc:

steve walker

Subject:

Response to Question from Walkers

Importance:

High

Good morning, Commissioners,

We received a question from one of the Commissioners regarding when the picture of the cattle grazing on the site of the Greenstone Solar Industrial Plant was taken. It was shown on page 4 of the Walker letter of opposition.

We looked it up and the picture was taken in May of 2010. However, it 100% reflects the view of the cattle we have seen every year for the past 12 years and up until last Fall when the cattle were taken off the field to go to their winter pasture.

We can prove this.

The 260 acres behind us is filled with eaten down grass from the cows which were there last Spring through Fall. The 260 acres behind us is filled with cow pies from last year.

This is a 100% completely operational cattle ranch. In fact, the Parks just dragged this pasture the week of March 9th because Steve watched them and was envious of the great tractor they were using.

Cattle ranchers typically take their cattle off the Carson Valley pasturelands in the Fall and take them to their winter pastures in Yerington, Antelope Valley, California or wherever. As part of their ranch operations they then drag the pasture in the Spring to break up the cow pies from the year before. The Parks Cattle Ranch dragged their pasture (the site of the Industrial Plant) the week of March 9th. They are still in operation.

Here's how that can be proven. Go out to the field and look at it. You will see eaten down grass. You will see where the cow pies were broken up by the dragging of the field. You will see some whole cow pies still in place where the tractor missed it.

You can't hide a 260 acre eaten down pasture.

You can't hide a 260 acre field of cow pies.

You can't hide broken up cow pies which were just broken up by the tractor dragging the field.

It's a fully operational cattle ranch that is still being dragged each Spring.

Steve will be sending you some pictures of the eaten down field and cow pies and compare it to pictures of our other neighbor's field which is lightly grazed and is located just a couple hundred feet away from the Park ranch. You will see the utilization of the pasture land very clearly.

However, we encourage you to come see it for yourself. You could come to our place and see the eaten down Parks field vs. the lightly grazed Coker ranch field. It's very telling.

Thank you very much for listening, Mary Walker 775-771-5964

From:

Mary Walker < marywalker@gbis.com>

Sent:

Saturday, April 11, 2015 11:06 AM

To:

Moss, Mimi; Sullivan, Hope; Margaret Pross; James Madsen; Anje de Knijf; Jo Etta Brown;

James Beattie; Frank Godecke; Papp, Emery; Kevin Servatius

Subject:

Fw:Image of Parks Cattle Ranch field taken today

Importance:

High

#### Dear Commissioners,

Below is a photo Steve shot this morning which shows the Parks Cattle Ranch field (site of the Greenstone Industrial Solar Plant) is full of eaten down grass. It is full of cow pies from last year. It shows how the cow pies were broken up by the dragging of the field the week of March 9th.

Please come see for yourself. Thank you, Mary

---- Original Message ----From: Steve Walker
To: Mary Walker Walker

Sent: Saturday, April 11, 2015 10:58 AM

Subject: IMG\_1036



From:

Mary Walker <marywalker@gbis.com>

Sent:

Saturday, April 11, 2015 11:12 AM

To:

Moss, Mimi; Sullivan, Hope; Margaret Pross; James Madsen; Anje de Knijf; Jo Etta Brown;

James Beattie; Frank Godecke; Papp, Emery; Kevin Servatius

Subject:

Fw: Image of Coker lightly grazed field next door

Importance:

High

#### Dear Commissioners.

Here is a photo taken by Steve this morning of the Coker ranch right next door. It is a lightly grazed field and you can see how much higher the grass is than the Parks place. Note the power pole in both photos for orientation. The power pole sits on the north west corner of the Industrial Plant site.

If the Parks hadn't grazed the field last year, the grass would be much higher on the Parks land and the cow pies would not be prevalent. It would look more like the Coker ranch.

You can't hide a 260 acre field of cow pies and eaten down grass.

Thank you very much for listening, Mary Walker 775-771-5964

---- Original Message ---From: Steve Walker
To: Mary Walker Walker

Sent: Saturday, April 11, 2015 10:59 AM

Subject: IMG\_1037



IMG\_1037

From:

Mary Walker <marywalker@gbis.com>

Sent:

Saturday, April 11, 2015 11:14 AM

To:

Moss, Mimi; Sullivan, Hope; Margaret Pross; James Madsen; Anje de Knijf; Jo Etta Brown;

James Beattie; Frank Godecke; Papp, Emery; Kevin Servatius

Subject:

Fw: Picture of NBC National TV Interview at 661 Genoa Lane

#### Dear Commissioners,

Please see photo below of the first NBC National TV interview at 661 Genoa Lane.

Carson Valley is a national treasure and it will be destroyed if the Greenstone Solar Industrial Plant is approved.

Please save our beautiful valley.

Mary Walker 775-771-5964

---- Original Message ----

From: Steve Walker
To: Mary Walker Walker

Sent: Saturday, April 11, 2015 11:02 AM

Subject: IMG\_0229



IMG\_0229

From:

Kelly Bullis < nevadabullis@gmail.com>

Sent:

Saturday, April 11, 2015 12:21 PM

To:

Papp, Emery

Subject:

Park/Greenstone Project

Regarding the application by Park Cattle Company and Greenstone Renewables proposal to locate a solar plant on 260 acres between Muller Lane and Genoa Lane.

As longtime Douglas residents (over 32 years) we want to go on record as being against approval to put a solar industrial electrical plant on any irrigated pastureland in the valley. Including this particular one.

Regards, Kelly and Nancy Builis 981 Sunburst Dr Carson City, NV 89705 Douglas County

Sent from my iPhone

From:

Denise Nosenzo <dtaran8@charter.net>

Sent:

Sunday, April 12, 2015 9:50 AM

To:

Papp, Emery

Subject:

Proposed Solar Panels in the Carson Valley

We are **OPPOSSED** to the solar industrial electrical plant proposed for **anywhere** in the Carson Valley.

Joseph J. Nosenzo

Denise T. Nosenzo

From:

Steve McCoy <stevenmccoy@gmail.com>

Sent:

Sunday, April 12, 2015 1:48 PM

To:

Papp, Emery

Subject:

**Proposed Solar Facility** 

Douglas County Planning Commission,

We are very concerned regarding solar facility proposed by Park Cattle Company and Greenstone Renewables, LLC to be located between Muller Lane and Genoa Lane. We do not believe this type of facility is appropriate for this area. We all need to work together to maintain the rural and open pastureland in the valley. The fact that the electrical output of the facility is slated to be sold into California to help a California utility meet its state mandated renewable energy requirements makes the proposed project even more unacceptable for our valley.

We would certainly hope that the Douglas County Planning Commission takes a very slow approach in regards to possible approval of this project and takes into consideration the desires of the residents of Douglas County before the citizens of the State of California.

Thank you for you consideration in this matter.

Regards.

Steve McCoy

stevenmccoy@gmail.com Cell - 775.240.6385 Home Office - 775.782.6901

From:

Mary Walker < marywalker@gbis.com>

Sent:

Sunday, April 12, 2015 4:02 PM

To:

Moss, Mimi; Sullivan, Hope; Margaret Pross; James Madsen; Anje de Knijf; Jo Etta Brown;

James Beattie; Frank Godecke; Papp, Emery; Kevin Servatius

Subject:

Walker Rebuttal to Staff Report for Greenstone Industrial Solar Plant

**Attachments:** 

Walker rebuttal to Staff Report.doc

#### Dear Commissioners,

Please find attached the Walker rebuttal to the Planning Department Staff report on the Greenstone Industrial Solar Plant project. We would like this report to be included in the April 14th Planning Commission packet.

We would appreciate your consideration.

Please do not hesitate to contact us if you have any questions.

Take care,

Steve and Mary Walker

From:

Char Christensen <char1936@gmail.com>

Sent:

Monday, April 13, 2015 10:35 AM

То:

Papp, Emery

Subject:

Proposed electrical plant

No way, no how!!! Let California fight their own battles. I want to see lovely meadows, not solar panels. Not a good idea.

Char Christensen Carson City, Nevada *Life is good* 



# Walker & Associates

661 Genoa Lane, Minden, Nevada 89423

MEMO TO: Douglas County Planning Commission

FROM:

Steve and Mary Walker

DATED:

April 12, 2015

SUBJECT: Walker's Response to Douglas County Planning Staff Report on Greenstone Industrial Solar Plant

The purpose of this memo is two fold. One is to question the findings made in the April, 2015 Planning Department staff report and ask why other Master Plan policies were not addressed in the staff report. Secondly to question the lack of review required by the recently modified development code to allow photovoltaic projects and how that makes Carson Valley A-19 lands very vulnerable to this type of development by out of state commercial interests.

Staff's statement on page 3 of 9 of the April 14th staff report states: It should be noted that pursuant to this permitted use matrix, the DCC considers this use a "Utility and public service use." This project is neither a "utility or public service use." It is a purely commercial power project with no ancillary benefits to anyone other than the developers. With the Applicants selling the power to California, there is no reason to issue this SUP to an Arizona Company. There is no benefit to Douglas County.

Under the Development Code specific to allowing a Special Use, the applicant must prove the project complies with the following.

## 20.604.060 Findings

A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations;

Under compliance with Master Plan and Area Plan requirements, the staff addressed two policies while the report submitted by the Walkers addressed 5 policies. Why were polices specific to compatibility to agricultural land uses left out of the staff report? Why were they not addressed?

Policy 15.1 of the Environmental Resources and Conservation Element of the Douglas County Master Plan states: "The county shall support the development of non-polluting renewable energy sources, such as solar, wind and geothermal energy, through provisions of appropriate land use designation and development regulations, which provide for on-site use of the energy resources." The staff report states "the proposed use will allow for the establishment of a non-polluting renewable energy source that will benefit off-site as opposed to on-site users". Staff is correct here. It is benefiting "off-site" users, therefore, it does not meet this policy.

Fax: (775) 782-4833

Phone: (775) 782-4469 stevewalker@gbis.com

How could one find the application is in compliance to the policy to "provide for <u>on-site</u> use of the energy source" when the benefit is to off-site users. Furthermore based on a conversation with Steve & Mary Walker and County planning staff, Director Moss stated "Greenstone has made no secret they are selling the power to California." The applicants intent to sell power to Liberty Energy further supported by the Walker's exhibits which shows the RFP by Liberty for exactly what is being proposed by the applicants. In a conversation with Steve Walker and the applicant Mr. Rutledge, the deal with Liberty Energy was described in detail. Why is this not discussed in the staff report? How could Policy 15.1 supporting <u>on-site</u> use of an energy source be supported by exporting the power out of State?

LU Policy 3.4 of the Douglas County Master Plan basically states that special use permits "are consistent with the Future Land Use Map, the policies contained in this Land Use Element, and other elements of the Master Plan."

Staff has described the site in the March staff report as "native sagebrush desert" and in the April staff report as "irrigated farmland primarily used in the past as pastureland" and in the response to the LU Policy 3.4 described as "unoccupied and fallow, and sporadically covered with native grass, saltgrass" (a native grass). What is it? Look on the 2014 Google Earth map provided in the packet by the Walkers. It is a pasture with an area in the south west portion that is poorly irrigated and occupied by phreatophytic shrubs. Eighty percent of the area is completely covered by pasture grasses and irrigated numerous time every year with two source of surface water. It was grazed last summer and in preparation for this year's grazing season was dragged on the week of March 9th to breakup manure and enhance green-up. The staff states compatibility with the LU policy because it will be irrigated and maintained as farmland. How could it be farmland if solar panels cover the entire 260 acres? Also to address compatibility with adjacent A-19 residential parcels staff states the lighting and fence detail will be worked out in design review after the project is approved. How can something be compatible if we don't know what it looks like? Right now the applicants describe the fence as a potential security fence, eight feet high with 3 strands of barbed wire. It will look like a prison, not our beautiful pasturelands located in the A-19 residential zone!

### Special Use Permit Code Requirements Cont.

B. The proposed use is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include, but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both, to mitigate such impacts;

The staff's response is that by simply following the most basic conditions required in Section 20.664.260 Solar Photovoltaic Facility one preserves the "character and integrity of the adjacent development and neighborhoods."

How could 260 acres of 15 foot tall metal industrial solar panels preserve the character and intergrity of single family homes and adjacent pastureland? The panels are visible from Highway 395 and Genoa Lane. It replaces a pastoral setting with an industrial use and its compatible?

Maybe most importantly "Findings for a Special Use Permit (H)

"The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare; or result in material damage or prejudice to other property in the vicinity.

How can Mr. Papp know that 260 acres of photovoltaic panels placed over an irrigated field with water tables near the soil surface, which require washing and if damaged release a variety of chemicals not be potentially detrimental to the public health? Photovoltaic panels per the Federal Government Publication – Solar Energy Environmental Considerations – "may contain hazardous materials and although they are sealed under normal operating conditions, there is potential for environmental contamination if they are damaged." See link: http://solareis.anl.gov/guide/environment/ and click on the Solar Energy tab.

Staff determined the project "not to be materially detrimental to the public health." This is a pretty bold statement made without any supporting documentation like an environmental impact study. Given the location of the site, it should be obvious that the runoff from the daily plant operations has to go somewhere. The potential impact on the current ranch operations, neighboring residential properties and ground water infiltration needs a lot more study.

What about the other policies within the Master Plan and the area Plan? Why are they not addressed? Goal and Policies like:

AG Policy 1.1 – Douglas County shall plan for the continuation of agriculture as a distinct and significant land use in the county.

AG Policy 2.2 Douglas County shall provide a range of compatible uses on the agricultural lands and means for agricultural property owners to obtain benefit from this land while achieving the public goal of agricultural preservation.

#### Chapter 2 - Land Use Element of Master Plan

Policy 2.2 - Douglas County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment.

#### North, Central and South Agriculture Community Plan

NCSA Goal 1 - To preserve and enhance the existing scenic and resource character of the north, central and south agricultural communities.

NCSA Policy 1.1 The County shall use its Master Plan and development regulations to maintain or enhance the existing rural and scenic character of the community.

#### Conclusion:

This project is purely a commercial power project with no ancillary benefits to any one other than the developers. Some have stated additional tax revenue to the County would occur. If as described by staff, the parcels will retain the A-19 zoning, and be grazed by sheep/goats the owners could easily achieve the \$5,000 per year net revenue requirement to keep the area taxed at the very low agricultural deferral rate. Additionally the devaluation of the surrounding parcels to the project could easily offset any gains in tax revenue.

Solar panels need to be washed periodically to be efficient. The applicant suggests this would occur twice per year. Other experts suggest up to 24 times per year. Photovoltaic panels per the Federal Government Publication – Solar Energy Environmental Considerations – "may contain hazardous materials and although they are sealed under normal operating conditions, there is potential for environmental contamination if they are damaged." The applicants are proposing 260 acres of panels on irrigated pasture with seasonal water tables (see soil site description in meeting packet) of 1 to 3 feet. If damaged or if repeated washing cause degradation of the seal these chemicals can very quickly leach into the Carson Valley groundwater.

How could a project of this size and with potential to pollute our valley's groundwater be allowed without any environmental review excepts staff's bold statement in support of the project? We in Douglas County through the quickly approved Development Code change to allow Photovoltaic Farms on A-19 zoned pasturelands have created a "developers playground." Our lack of requirements/environmental review to develop large scale photovoltaic power plants makes this beautiful valley the lowest cost option around to develop power for the California renewable energy market. Additionally without some environmental review and more stringent requirements, the County leaves itself in a vulnerable position of potential liability.

Stop. Deny the Greenstone Application. Revisit the Development Code and reconsider where these projects belong and how we should review them.

Sincerely,

Steve & Mary Walker

From:

Carrie Richardson <cgrichardson@gmail.com>

Sent:

Monday, April 13, 2015 11:23 AM

To:

Sullivan, Hope; Papp, Emery

Subject:

Special Use Permit Greenstone Renewables, LLC

Dear Douglas County Planning Commission.

It has come to my attention that Greenstone Renewables, LLC and Park Cattle Company are applying for a special use permit on the acreage between Mueller and Genoa Lanes for the purpose of solar panel fields.

I have been a resident of the Carson Valley since 1999. I live on Beverly Way, located in the Autumn Hills area along Foothill Road. I work for Gillmor Coons Real Estate, in Genoa.

For personal and business reasons, I am <u>vehemently apposed</u> to the prospect of any agriculturally zoned land being granted permits for industrial use in the Carson Valley.

We have a limited amount of land in our valley. Our open space is limited and precious to all of us.

Please do not allow for the destruction of open spaces, our agricultural lands, our reason for living here.

Thank you for your time.

Sincerely,

Carrie Richardson
NV Real Estate Sales Associate
Gillmor Coons Real Estate Group, LLC
2288 Main Street
POB 996, Genoa, NV 89411
Cell: (775)691-4338
Office: (775)782-3434
Fax: (775)782-0088
cgrichardson@gmail.com
NV License #S.0168340

From:

Nita Schwartz <nitasandhu@hotmail.com>

Sent:

Monday, April 13, 2015 12:00 PM

To:

Sullivan, Hope; Papp, Emery

Subject:

solar field btw mueller and genoa lane

I am aghast that the county would even consider this affront to our natural beauty. Genoa is increasingly becoming a tourist destination because of our natural beauty and character of our "wild west" town.

I wholeheartedly oppose this action against those of us who live in this area.

The carson valley is a gem in Nevada. There is plenty of desert with no population around it in Nevada where this would be more appropriate. I hope that our county commissioners are more interested in representing our interests in our lovely area than they are in lining their own pocketbooks. That is truly the only reason I can think of that they would even consider such a travesty.

Nita Schwartz, MD Hospice Medical Director Gentiva Hospice 775-882-5735

From:

Nita Schwartz <nitasandhu@hotmail.com>

Sent:

Monday, April 13, 2015 12:04 PM

To:

Sullivan, Hope; Papp, Emery

**Subject:** 

FW: solar field btw mueller and genoa lane

I ask that the comments in the email below be added to the record for the planning committee meeting tomorrow April 14th at 1pm.

Nita Schwartz, MD Hospice Medical Director Gentiva Hospice 775-882-5735

From: nitasandhu@hotmail.com

To: hsullivan@co.douglas.nv.us; epapp@co.douglas.nv.us

Subject: solar field btw mueller and genoa lane

Date: Mon, 13 Apr 2015 11:59:40 -0700

I am aghast that the county would even consider this affront to our natural beauty. Genoa is increasingly becoming a tourist destination because of our natural beauty and character of our "wild west" town.

I wholeheartedly oppose this action against those of us who live in this area.

The carson valley is a gem in Nevada. There is plenty of desert with no population around it in Nevada where this would be more appropriate. I hope that our county commissioners are more interested in representing our interests in our lovely area than they are in lining their own pocketbooks. That is truly the only reason I can think of that they would even consider such a travesty.

Nita Schwartz, MD Hospice Medical Director Gentiva Hospice 775-882-5735

From:

Jim Lafave <jlafave@me.com>

Sent:

Monday, April 13, 2015 12:13 PM

To:

Sullivan, Hope; Papp, Emery; Rao, Lucille

Subject:

Opposition of Greenstone Solar Farm

Dear Douglas County Planning Commission,

I have been made aware of a very serious decision you will be making on Tuesday, April 14. as it relates to Park Cattle Company and Greenstone Renewable, LLC's proposal to place a solar industrial plant on 260 acres of irrigated pasture land in the heart of Carson Valley.

While I cannot attend the meeting in person due to business travel, I wanted to be sure and express my extreme concerns on the impact this vote will make on many of my county neighbors that have made this Valley their home for the purpose of being surrounded by mother nature and ranch life. The beauty of the valley from all vantage points within our valley will be looking over a sea of solar panels and negatively transformed forever.

I'm being told the maximum height of the panels will be 15 feet high above ground, with the potential for an 8 foot high security fence surrounding the perimeter. The sheer size and density of these panels will be detrimental to the sage, vegetation and animal habitats and if there is no vegetation, what will hold the top soil? It will most likely be replaced by gravel! The desert is one of the most beautiful yet fragile of ecosystems. Man-made loss of vegetation, topsoil and animals in combination with our valley's high winds may lead to a reduction in diversity and decline in desert health within this area — never to be repaired or replaced.

As I understand it, one of the primary duties of the Douglas County Planning Commissioners is to develop policies guiding the county in the delivery of services and achieving community goals. It would be incredibly disheartening if you and your fellow board commissioners feel that backing a 260 acre solar panel in the heart of our valley is an appropriate use of your duties.

I am not against alternative energy and believe it can be a viable resource ... when properly located so as not to negatively impact residents. I fear the volume of financially motivated voices resonate much louder than the average residents' voice here in Douglas county.

I am wholeheartedly against this occurring in our Valley.

-Jim Lafave-497 Daggett Creek Loop (8 yr resident of Douglas County) Genoa, NV 617-306-3974 jlafave@me.com

From:

carolyn.proto@charter.net

Sent:

Monday, April 13, 2015 12:31 PM

To:

Sullivan, Hope; Papp, Emery

Subject:

Save our Beautiful Valley

When I read the proposal to destroy our beautiful valley with four miles of solar panels running down our main highway. It made me very upset we live in such a beautiful valley, why would you want to destroy that? Driving home from Carson City and as I start down the hill I often say to myself "how blessed I am to live here". When I have friends or family visit they often say driving down 395 to my house it is such a beautiful drive now I know why you moved here.

Have there been any studies done on how it will effect our eco system? There is a solar farm in Southern California and people have told us that the panels get so hot that they can burn birds that fly over. Is that a true statement?

I agree with the idea of the solar farm but I highly disagree with the proposed location. The city of Minden just spent a few million dollars to beautify the four corners and now you want people to drive through a solar farm before they reach the four corners. What's beautiful about that?

The bottom line is that building this solar farm does not agree with the master plan for our community. So please do not destroy the beauty of our valley. If you have any questions please feel free to contact me 775-392-2175.

Carolyn Proto

From:

vickiejroberts@gmail.com

Sent:

Monday, April 13, 2015 2:48 PM

To:

Papp, Emery

Subject:

395 solar panels. Please vote NO.

Carson valley 395 is one of NV's more scenic drives.....please don't ruin it.

Victoria J. Roberts

775.782.8323. Twenty five years residing in Gardnerville.

Sent from my iPad

From: Linda Gomez-Prescott <gomezlindasue@icloud.com>

**Sent:** Monday, April 13, 2015 2:53 PM

To: Papp, Emery

Subject: Solar Industrial plant

#### Hello

Please vote against the solar industrial plant. Carson Valley is know for being picturesque. This will certainly not enhance our valley, or encourage visitors to come here.

#### Vote NOI

Thank you for your consideration.

From:

Ron & Helen Lee <tulees3@qmail.com>

Sent:

Monday, April 13, 2015 3:37 PM

To:

Papp, Emery

Subject:

Solar Panels

Please be advised that we are TOTALLY AGAINST putting the Solar Panels along Hwy. 395 in our beautiful Valley. Seems to us that there are MANY other locations that would be more appropriate and not an eyesore. Please consider cancelling this plan. We are unable to attend the Planning Commission meeting on April 14th, but want our comments heard. Thank you.

Ron & Helen Lee

From: Joni jackson <jmj40@msn.com>
Sent: Monday, April 13, 2015 3:44 PM

To: Papp, Emery

**Subject:** Proposed Solar Plant

My wife and I would like to express our opposition to the proposed solar plant that will be considered by the Douglas County Planning Commission tomorrow. Before moving to the beautiful Carson Valley, my wife and I lived in Lancaster, California and were able to witness first hand the devastation caused by solar plants. Several years ago, several solar plants were built in the westside of Lancaster. Not only are they not estetically pleasing, they caused horrible problems with dust. The dust became so bad on occasions that it caused accidents on the freeway. Like the Carson Valley, the wind in Lancaster generally blows from the west to the east. The homes and business and roadways east of the solar plants in Lancaster experienced a dramatic increased in dust caused by the solar plants.

My wife and I did not retire in the Carson Valley to be in an area that is adversely affected by solar plants. Thank you for considering our opinion. Respectfully, Frank and Joni Jackson

From:

Marc Houle <golddiggermining@yahoo.com>

Sent:

Monday, April 13, 2015 4:46 PM

To:

Papp, Emery

Subject:

solar array project..

I vehemently oppose this project............. With plenty of other options to locate a project, like in old alkaline flats or desert locations or public lands we don't need this in such a wonderful location... NO FOR ME and MY FAMILY...

From:

Margaret Vander Laan <mvlsac@sbcglobal.net>

Sent:

Monday, April 13, 2015 5:32 PM

To:

Papp, Emery

Subject:

Say NO! to a solar farm in the Carson Valley

# Planning Commission Member Papp:

My husband and I are most definitely opposed to the plan and idea of a solar farm in the Carson Valley! The beautiful valley is an agricultural area and treasure, not wasteland. You are stewards of this beautiful place and you need to protect what makes the Carson Valley unique! Say "No!" to this bad idea!

Dirk and Margaret Vander Laan Gardnerville NV

From:

Pamela Sauer <macred533@gmail.com>

Sent:

Monday, April 13, 2015 5:50 PM

To:

Sullivan, Hope; Papp, Emery

Subject:

Proposed Solar Panels on Parks land adjacent Hiway 395 and Genoa Road/Muller Rd

I m sure you have heard negative concerning this above proposal and I'm not in favor either unless Douglas County as a whole can have a piece of the profits from this installation and I am also not in favor if there is any depletion to water or funds concerning Douglas County. Personally, I d like to see the solar panels near or in the Pine Nuts instead of along our very scenic highway.

I think this is a good time to voice my opinion that Douglas County should be thinking of ways and proposing a study to install solar panels and make use of windmills in order to be self sufficient instead of reliant on state power companies. The extra power could be sold to neighboring States and perhaps used by other counties in our own state.

Thank you,

Pamela Sauer 987 Peralta Way Minden 89423

From:

elliebcnv@att.net

Sent:

Monday, April 13, 2015 6:44 PM

To:

Papp, Emery

Subject:

save our beautiful valley

We oppose the solar panel project between Muller lane and Genoa lane. Stop another American greed company from destroying our beautiful valley. FROM DON FOX AND ELEANOR CAMPBELL I

From:

eshiveteach@comcast.net

Sent:

Monday, April 13, 2015 6:51 PM

To:

Papp, Emery

Subject:

No solar plant in Carson Valley

#### Dear Commisioners.

I am shocked that Douglas County planning commissioners and residents are faced with yet another attempt to sully our beautiful valley with a solar panel field. Our beautiful Carson Valley Is not the place for this eyesore. The first time time I drove over Kingsbury Grade in 2010 I thought I had died and gone to Heaven. I had never seen anyplace so lovely and green, pastoral and peaceful. My husband and I quickly chose Genoa as our new hometown. We purchased our home here in 2012. We frequently hike and bike in the valley. One of our favorite rides is through River Fork Ranch from Genoa Lane to Muller Lane. We love to hike the Genoa Trail with our friends and family and gaze down on the miles of open range and acres of ranch land. Residents of our county should not be faced with this ongoing attempt to diminish our quality of life and lower our property values. There are so few places on Earth with the awe inspiring vistas and views that drew us and many others to our valley. I implore you to deny the permit to build this solar panel field and make it clear to this company and others that our valley will not be home to their industrial atrocity. Please vote to protect our valley. We are all counting on you to make the right decision. NO SOLAR FARM IN CARSON VALLEY. Gratefully,

Steve and Elaine Shively P.O. Box 892 Genoa, NV 89411

Sent from XFINITY Connect Mobile App

From:

Monique Giron <gmgiron12@earthlink.net>

Sent:

Monday, April 13, 2015 8:38 PM

To:

Papp, Emery

Subject:

"Save Our Beautiful Valley"

I oppose the implementation of a solar industrial plant in Carson Valley. Our beautiful valley supports wildlife and agriculture, a solar facility would compromise our beautiful natural resources. Thank you. Monique Giron, 705 Marsh Rd., Carson City, NV. 89701. 775-400-0154

Sent from my iPad

From: Sent: Gary <pinstripe@pyramid.net> Monday, April 13, 2015 8:46 PM

To:

Sullivan, Hope; Papp, Emery

Subject:

Solar Farm

I am opposed to the Solar Farm proposed for construction off of Muller Ln. Please listen to the voices of so many county residents who are telling you that we have had it with the attempts to "industrialize" our valley with gravel pits, solar farms, etc. Please protect our valley by following the provisions of the Master Plan and zoning regulations and "maintaining the existing rural and scenic character of the community".

Thank you, Gary Griffith

From:

Albert Colee <b.colee@icloud.com>

Sent:

Tuesday, April 14, 2015 8:02 AM

To:

Papp, Emery

Subject:

**Greenstone Solar Farm** 

I oppose the special use permit for the Greenstone Solar Farm. Albert Colee. Gardnerville Nv.

Sent from my iPhone

From:

Elva Juchtzer <elvaj4@charter.net>

Sent:

Tuesday, April 14, 201S 8:08 AM

To:

Papp, Emery

Subject:

solar industrial electrical plant on 260 acres of irrigated pastureland between Muller

Lane & Genoa Lane.

Please do not approve the above proposal. We live in the most beautiful valley in Nevada, why ruin it with solar generation. There are thousands of acres in the state that do not have human populations that could be used for this kind of project.

Thank you, Elva Juchtzer, Minden Nv.

From:

Donna Colee <bandcolee@frontier.com>

Sent:

Tuesday, April 14, 2015 8:16 AM

To:

Papp, Emery

Subject:

**Greenstone Solar Farm** 

I oppose the special use permit for the Greenstone Solar Farm. Donna Colee. Gardnerville. Nv

Sent from my iPhone

From:

Judy Williams <jcwminden@gmail.com>

Sent:

Tuesday, April 07, 2015 2:46 PM

To:

Papp, Emery

Subject:

Solar Farm Permit

As a longtime CV resident, I oppose the Greenstone Solar Farm Special Use Permit as proposed. I am not against a solar farm in the valley, but given the extent of Park property, it seems the farm could be located out of view of the majority of residents and travelers while retaining all the necessary features for optimal solar power.

We are uniquely blessed by the incredible view from the valley floor up to the majestic Sierra mountains and it should not be scarred by metal and glass. It is not in keeping with the Land Use Goal 2 of the Master Plan since the solar farm would not "retain the beauty, natural setting and resources and the rural agricultural character of the county" if located as the permit requests.

Thank you for your time.

Judy C. Williams 1614 Mono Ave. Minden

From:

tjmannnev@aol.com

Sent:

Tuesday, April 07, 2015 11:47 AM

To:

Papp, Emery

Subject:

solar farm

My husband and I agree whole-heartedly, that Carson Valley would be disturbingly and disgustingly diminished by acres and acres of 15' high solar panels. We moved here 17 years ago because of the scenic vistas, wonderful people, and the posltive attitude toward environmental Intelligence. We have supported the Eagles and Agriculture events, and routinely take our cameras out to capture images of the spectacular natural surroundings that are now available to us. Without the pastures, streams, and brush in the middle of the valley, we would hardly be able to enjoy the sightings of various hawks, eagles, owls, coyotes, cattle and other assorted creatures. Without the clear, unblemished landscape we would not appreciate the contrast of rugged mountains, trees, and incredible skies that are ours to view each day. Often, when driving down to the valley on the Kingsbury Grade, we stop to absorb the wonder of the vast, and magnificent sight before us. I don't think it would look the same if it was covered with the glaring reflections off of a "farm" of metal and plastic solar panels.

**NO THANK YOU!** 

Teresa and John Manning

From: Gary Williams <svreverie@charter.net>

**Sent:** Tuesday, April 07, 2015 11:38 AM

To: Papp, Emery Subject: Solar farm

If there is a need for a solar farm in our valley there has to be a better place to put it. I know the owner would like it there for ease of access to the grid BUT let's preserve the beautiful corridor we have through our valley. Park Land and Livestock has adequate property in the sage brush to the east. We don't need to look like the solar farm at 4 Corners on 395 in California. Thanks for listening, Gary Williams, 1614 Mono Ave., Minden (48 year resident of Carson Valley)

From:

Sylvia da Costa <sjdacos@yahoo.com>

Sent:

Wednesday, April 08, 2015 11:36 AM

To:

Papp, Emery

Subject:

Proposed Solar industrial plant

#### To Whom it may concern:

I will not be able to make the April 14th meeting regarding this development, but please take my extreme disapproval of this proposed industrial solar complex. I realize that Park Cattle Company probably have plenty of sway in Douglas County due to their ample ownership of ranch land here but please do not let our agricultural valley be turned into an industrial center to help California and the deep pockets of the uninvolved Greenstone Renewables company.

While I support solar energy whole-heartedly, these sites need to be placed away from habited areas. I've heard many times that the sites need to be near transmission lines but connectivity expenses should be born by the companies wanting to benefit financially by destroying such places as our Valley and where we live.

Sincerely, Sylvia da Costa 1172 Del Mesa Ct Minden, NV 89423 sidacos@yahoo.com

From: Thomas F Riley <thomasfriley@sbcglobal.net>

Sent: Wednesday, April 08, 2015 1:43 PM

To: Papp, Emery

Cc: savecarsonvalley@gmail.com
Subject: Proposed Solar Complex

I am sending this e-mail to object to the solar complex proposed by Park Land & Cattle Co. to be placed on the irrigated floor of the beautiful Carson Valley. I was born in Carson City and raised in Minden, and still have relatives living in Gardnerville. I have been proud of the manner in which Douglas County has protected the natural Valley floor by directing most development to the foothill areas over the years.

I, as well as a great number of other local Nevadans and a considerable number of tourists, believe that Carson Valley is a scenic treasure and should stay that way in perpetuity. The proposed development is a direct affront to the decades of planning and care taken by Douglas County to assure the Valley floor remains free from commercial and industrial development.

A solar development of any size is an eyesore, but the location of the proposed project makes it a visual abomination. It is clear that Park Land & Cattle is so greedy they would destroy a 100 year-old scenic treasure for a quick buck. The proposed solar project should be denied, and the developer should be forced to put its tacky industrial project out in the desert.

Thomas F. Riley 6770 Sonterra Lane Reno, Nevada 89523

Phone 775-747-3220

From:

CindyHEssaff@aol.com

Sent:

Wednesday, April 08, 2015 4:59 PM

To:

Papp, Emery

Cc: Subject: savecarsonvalley@gmail.com PLEASE! No Solar Farm in DC

#### Dear Sirs and Madames:

Please reconsider the plans to place a solar farm in beautiful Douglas County. If only to sell energy to California - why not have California add these solar panels to the existing hill sides covered already with wind turbines. I appreciate the use of solar panels but, on a house by house basis - not covering the valley floor of one of the last remaining beautiful sights in Northern Nevada.

I am a transplant from California and I saw first hand what progress did to the Valley of Santa Clara, Sunnyvale, San Jose etc., with the urban sprawl and strip malls on every corner. What was one of the most beautiful, flowering/fruit orchards is now covered in concrete and yes, parking lots!

My family actually moved from the Los Angeles county in 1950 to the Golita/Santa Barbara area because of the urban growth - then, that became too much! Once it's gone...it's gone forever! NEVER will it be the same if we don't take a stand now and protect our valley.

I also realize that Park Cattle Company wants to expand it's operations but please, don't sell out for the sake of industrial use!

Sincerely,

Cindy Hunter Essaff

From:

John Benzing <jbenzing@pyramid.net> Wednesday, April 08, 2015 5:28 PM

Sent: To:

Papp, Emery

Cc: Subject: savecarsonvalley@gmail.com Proposed Solar Power Plant

From information shown in the newspaper, I see that Park Cattle and Greenstone Renewables is proposing a large solar power plant on the west side of Highway 395 between Mueller Lane and Genoa Lane. The article says that the power to be produced is to be sold in California, not Nevadal It is totally inappropriate to place such a facility in our beautiful green valley! We overlook the valley and do not want to be looking down on shining mirrors in the middle of this beautiful valley. Why not have the developers go to California where they would be much closer to the end users and there are thousands of barren acres of flat land in the California Central Valley which are available, especially now that the large Ag growers cannot water all that arid land for crops. Most developers of large, commercial solar arrays decided long ago that the best location for such facilities is in remote locations, away from farms and residents.

Just say NO to this bad ideal

From:

Wolf Kohz <wolf@wolf-products.com>

Sent:

Wednesday, April 08, 2015 7:28 PM

To: Cc: Sullivan, Hope Papp, Emery

Subject:

**Greenstone Solar Farm** 

Please be advised that we (52 year residents of Douglas County) oppose granting special use permit to referenced entity!

Judith Kohz

Wolfgang Kohz

1163 Casa Blanca Court

Minden, NV 89423

(775) 267-9890

From:

gailteig@aol.com

Sent:

Thursday, April 09, 2015 3:08 PM

To:

Sullivan, Hope; Papp, Emery

Subject:

Solar project

To whom it may concern:

What are you thinking?

While I believe that property owners have some discretion with their property and its use, the zoning is a guide that should not be taken lightly. This project goes way beyond the intended agricultural use or zoning. On top of that, the scope is incredibly over the top. Over 200 acres of approved solar panels in our valley which so many are working so hard to keep "green" and functioning as intended.....in agriculture.

The approval of such a project would set a dangerous and foreboding precedent. While some wouldn't blame a struggling agricultural operation from "selling out" to California interests, there are reasons for our zoning and restrictions therein. If this project is approved, others will follow. California is hungry for our resources, be they solar power, wind power, or water rights. Nevada is close by. Nevada is wide open. Nevada might be vulnerable. Let's hope Douglas County is not.

Send a message and deny this project. Since this isn't the first project of its kind, let's assume it won't be the last. In the meantime, there should be a study and some limitations put in place. Keep these panels from overpowering what nature has given us here in the Carson Valley.....pristine grazing and habitat country. Nevada has plenty of wide open spaces, perfectly suited for developing solar power on this scale. Go there.

A study should take into consideration the beautiful view shed that our pasture lands provide. It should recognize the rights of neighbors and keep solar projects from interfering with others. It should also question the value of using our agricultural properties for the benefit of neighboring states. County officials should also recognize that there are historical prerogatives at work in our community. Taking away any agricultural acreage goes beyond the landowner themselves. It diminishes the uniquely special characteristics of our valley.

Respectfully submitted,

Gail Teig, Owner Van Sickle Station Ranch

From:

Sullivan, Hope

Sent:

Thursday, April 09, 2015 4:58 PM

To:

Papp, Emery

Subject:

FW: SPECIAL USE PERMIT FOR THE GREENSTONE SOLAR FARM

Copy to file, PC, copies for public at meeting.

From: guy.proto@charter.net [mailto:guy.proto@charter.net]

Sent: Thursday, April 09, 2015 4:57 PM

To: Sullivan, Hope

Subject: SPECIAL USE PERMIT FOR THE GREENSTONE SOLAR FARM

This e-mail is to inform you that as a Douglas County Resident I am <a href="OPPOSED">OPPOSED</a> to the special use permit for the GreenSstone Solar Farm. This project violates all of the following and would be an absolute disaster for to the beauty of this valley:

### 20.604.060 Findings for a Special Use Permit

When considering applications for a special use permit, the commission or board, where applicable, must evaluate the impact of the special use on and its compatibility with surrounding properties and neighborhoods to ensure the appropriateness of the use at a particular location and make the following findings:

20.604.060 A. The proposed use at the specified location is consistent with the policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations;

20.604.060 B. The proposed use is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include, but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both, to mitigate such impacts;

20.604.060 E. The proposed use incorporates features to minimize adverse effects, including visual impacts and noise, of the proposed special use on adjacent properties;

20.604.060 G. The proposed special use complies with all additional standards imposed on it by the particular provisions of this chapter and all other requirements of this title applicable to the proposed special use and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of this title; and

20.604.060 H. The proposed special use will not be materially detrimental to the public health, safety, convenience and welfare, and will not result in material damage or prejudice to other property in the vicinity. (Ord 1319, 2010; Ord. 801, 1997; Ord. 763, 1996; Ord. 295, 1978; Ord. 167, 1968)

#### Chapter 7 – Agricultural Element of Master Plan

AG Policy 1.1 – Douglas County shall plan for the continuation of agriculture as a distinct and significant land use in the county.

AG Policy 1.4 Douglas County should encourage the industries that preserve and promote environmental quality, or serve the local needs of our community

AG Policy 2.2 Douglas County shall provide a range of compatible uses on the agricultural lands and means for agricultural property owners to obtain benefit from this land while achieving the public goal of agricultural preservation

#### Chapter 2 - Land Use Element of Master Plan

Land Use Goal 2 -To retain the beauty, the natural setting and resources, and the rural/agricultural character of the county while providing opportunities for managed growth and development

Land use Policy 2.2 - Douglas County shall use its planning and development regulations to protect residential neighborhoods from encroachment of incompatible activities or land uses which may have a negative impact on the residential living environment

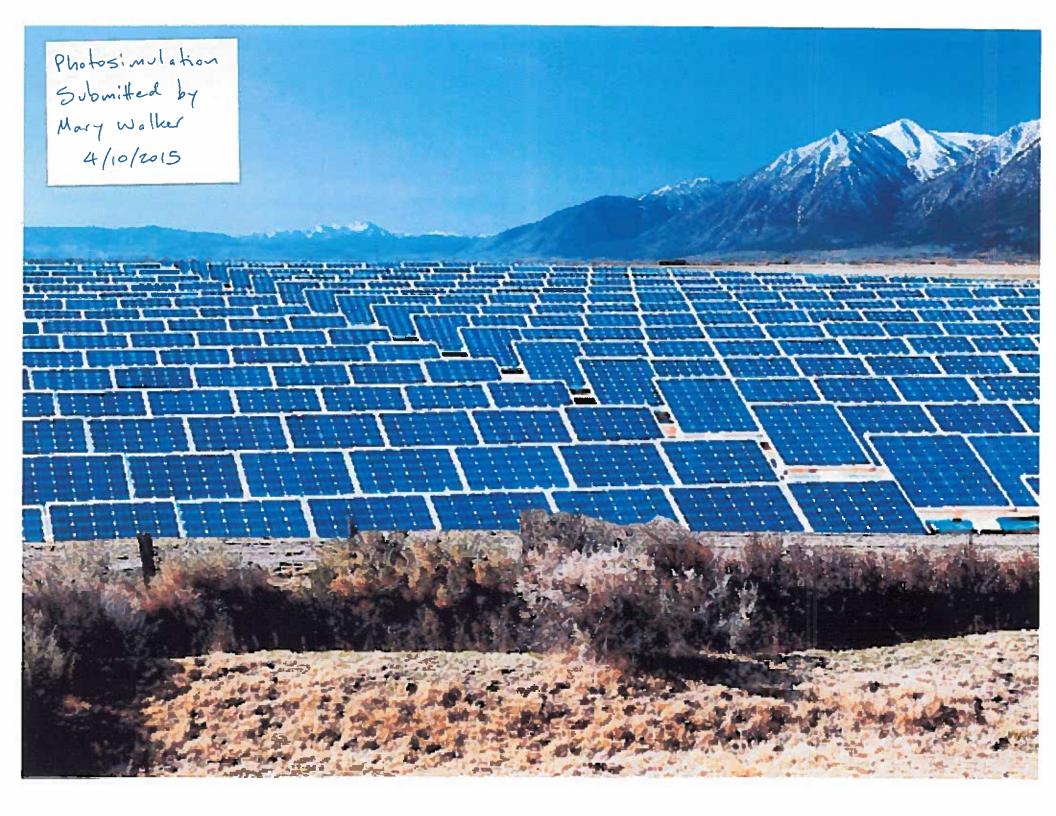
NCSA Goal 1 To preserve and enhance the existing scenic and resource character of the north, central and south agricultural communities.

NCSA Policy 1.1 The County shall use its Master Plan and development regulations to maintain or enhance the existing rural and scenic character of the community.

If you ned to reach me I my contact info is:

Guy Proto 1251 N. Santa Barbara Dr Minden, Nv 89423

Home: (775) 392-2175 Cell: (775) 781-3141



From:

Mary Walker < marywalker@gbis.com>

Sent:

Friday, April 10, 2015 6:51 AM

To:

Moss, Mimi; Sullivan, Hope; Papp, Emery

Subject:

Additional Information for Greenstone Industrial Solar Farm Project Hearing

Attachments:

Solar Farm overlay.tiff

Importance:

High

#### Good morning,

Steve and I hired a local photographer to take a picture of the Greenstone Industrial Solar Farm site and overlay it with solar panels in order to visualize the incompatibility of the use to allow solar panels on Carson Valley irrigated pastureland. Please see attached.

If you could please provide this as additional information for the agenda packet for Tuesday, I would appreciate it.

Thank you,

Mary

From:

bob marsh <bd140787@gmail.com>

Sent:

Friday, April 10, 2015 10:25 AM

To:

Papp, Emery

Subject:

Solar Project at Muller & Genoa

Mr Papp,

Concerning this solar project by Park & Greenstone LLC and we have reached out to the Walker family (aka "Save Carson Valley Coalition") concerning this proposed project. We have not, as yet, received any response from the Coalition.

We have concluded that we are in overwhelming support of the county proceeding with the above project. We will attempt to attend the upcoming meeting to lend our voice of support.

Thank you for your forward thinking,

bob & LeAnn Marsh Gardnerville, nv

From:

Sullivan, Hope

Sent:

Friday, April 10, 2015 10:52 AM

To: Subject: Papp, Emery Fwd: solar

Copy like others.

Sent from my iPhone

Begin forwarded message:

From: Anje de Knijf <adeknijf@gmail.com>
Date: April 10, 2015 at 10:06:21 AM PDT

To: "Sullivan, Hope" < HSullivan@douglasnv.us>

Subject: Fwd: solar

### Hi Hope, Here's another email I received. Please forward to other commission members. Thanks so much! Anje

----- Forwarded message -----

From: dick clark <dclark1940@gmail.com>

Date: Thu, Apr 9, 2015 at 10:08 AM

Subject: solar

To: adeknijf@gmail.com

Solar is to lower the use of fossil fuels. So that's a good thing. There is lots of good area in BLM controlled land. Using fertile farm / ranch land like Harry Reed tried in Southern Nevada. That land and this land should be used to feed America. Thanks Dick Clark 656 Stonesthrow rd Gardnerville I have lived here 47 years

Anje de Knijf, Broker/Salesperson

Sierra Sotheby's

anje.deknijf@sothebysrealty.com

sierrasothebysrealty.com

210 Elks Point Rd. Suite 102 | PO Box 1370 | Zephyr Cove NV | 89448 m 775.721.5229 | t 775-588-7710 | 888.444.1505

From: Dixie Gee <dixieag@outlook.com>
Sent: Friday, April 10, 2015 3:07 PM

To: Papp, Emery Subject: solar plant

SAVE OUR BEAUTIFUL VALLEY Do Not build solar plants on cultivated land to provide electric power to California! Let California build their own solar plants. Dixie gee, 5 month resident of Yerington, ex-California resident.

# Douglas County Planning Commission Meeting April 14, 2015

Appeal (AP) 15-003, for Franklin "Harry" Ernst, appealing Staff's approval of a Major Design Review for Esplanade at the Ranch, Development Application (DA) 14-047.



### Title

For possible action. Discussion on Appeal (AP) 15-003, an appeal by Franklin "Harry" Ernst of staff's approval for DA 14-047, a major design review for Esplanade at the Ranch located at the south west corner of Gilman Avenue and Heybourne Road (APN 1320-33-210-069) in the MFR/PD zoning district and within the Minden-Gardnerville Community Plan. The appeal is regarding compliance with the minimum standards for development of the site pursuant to Chapter 20 of the Douglas County Code, consistency with the Douglas County Design Guidelines for Multi-Family Development, and the safety of the circulation system.



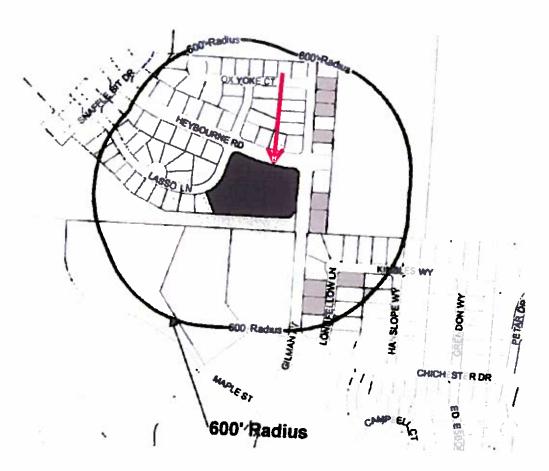
# Background

- The Ranch at Gardnerville (PD 04-008) was approved on 12/02/2004
- There have been 7 amendments or modifications since the original approval
- On 10/04/2012, the number of units in the MFR was increased from 30 to 46 units
- On 09/09/2014, the PC considered a Tentative Subdivision Map for a 42-unit Condominium project with requests for a ZMA on subject parcel, multiple variances, and private roads internal to the subject site



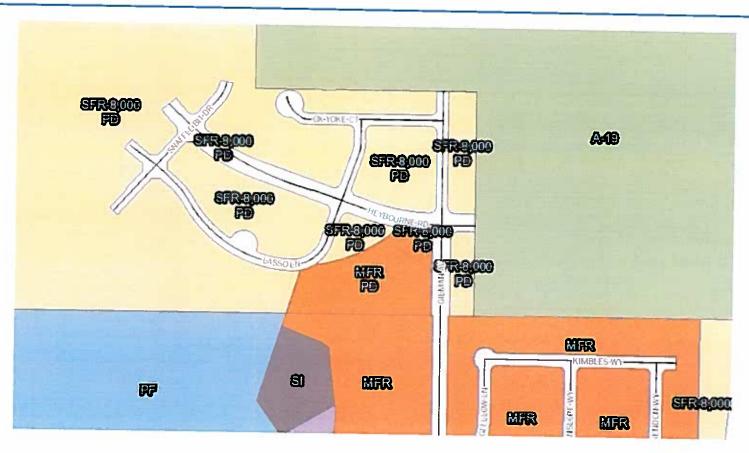
# Vicinity Map

Noticing: Property owners within 600 feet of the subject site were noticed of the request.





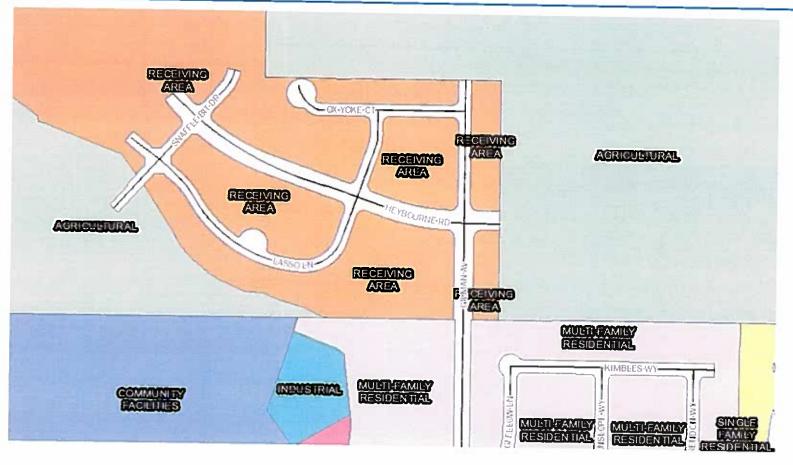
# Zoning



MFR/PD (Multi-Family Residential/Planned Development)



## Master Plan Land Use





# Development Standards

### Maximum density allowed is 16 units/acre

- Maximum no. of units allowed is 46
- Project proposes 41 units

Meets parking requirements, 92 spaces provided

Meets all setback and separation requirements

Meets lot size, lot width, lot depth requirements

Meets private area requirements

Conditioned to meet landscaping and lighting requirements

### **Aerial**





### **Aerial**

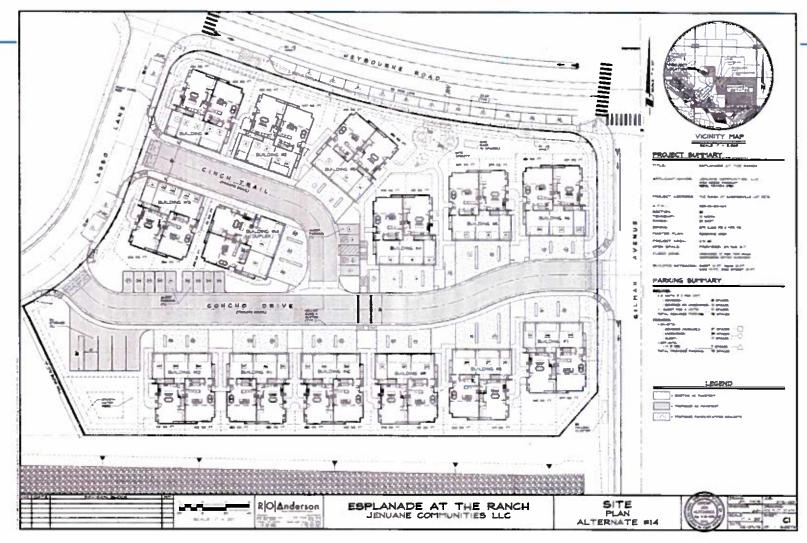




# Site Plan (Approved by Town of Gardnerville)



# Site Plan (Approved by Staff)





# Consistency with Design Guidelines

Concept is to make units resemble large single family homes

- Building orientation varies from public view
- Multiple elevations
- Multiple material color schemes
- Varying rooflines
- Each unit has its own garage
- Most units have driveways
- Fencing meets DCC height requirements

# Streetscape





### **Elevation A**





### **Elevation B**





### **Elevation C**



### **Elevation D**



### **Elevation E**



# Circulation System

### All interior access drives are private

- Parking on interior access drives is prohibited
- Perimeter and internal sidewalks are provided
- Line of site at entrances is preserved by design or conditions
- Cut-through traffic is a possibility however thruaccess is needed for emergency vehicles and refuse pickup.

# Findings

### FINDINGS FOR A DESIGN REVIEW

Staff has made all of the required findings in the Affirmative as stated in the staff report. They are as follows:

- A. The proposed development is consistent with the goals and policies embodied in the adopted master plan and the general purpose and intent of the applicable district regulations.
- B. The proposed development is compatible with and preserves the character and integrity of adjacent development and neighborhoods and includes improvements or modifications either on-site or within the public rights-of-way to mitigate development related adverse impacts, such as traffic, noise, odors, visual nuisances, or other similar adverse effects to adjacent development and neighborhoods. These improvements or modifications may include but shall not be limited to the placement or orientation of buildings and entryways, parking areas, buffer yards, and the addition of landscaping, walls, or both.
- C. The proposed development will not generate pedestrian or vehicular traffic which will be hazardous or conflict with the existing and anticipated traffic in the neighborhood



### Findings

- D. The proposed development incorporates roadway improvements, traffic control devices or mechanisms, or access restrictions to control traffic flow or divert traffic as needed to reduce or eliminate development impacts on surrounding neighborhood streets.
- E. The proposed development incorporates features to minimize adverse effects, including visual impacts, of the proposed development on adjacent properties.
- F. The project is not located within an identified archeological/cultural study area, as recognized by the county. If the project is located in a study area, an archeological resource reconnaissance has been performed on the site by a qualified archeologist and any identified resources have been avoided or mitigated to the extent possible per the findings in the report.
- G. The proposed development complies with all additional standards imposed on it by the particular provisions of this chapter, the Douglas County design criteria and improvement standards and all other requirements of this title applicable to the proposed development and uses within the applicable base zoning district, including but not limited to, the adequate public facility policies of Chapter 20.100.
- H. The proposed development will not be materially detrimental to the public health, safety, convenience and welfare, or result in material damage or prejudice to other property in the vicinity.



### Recommendation

Affirm the decision of staff and deny the appeal, upholding staff's recommendation for approval of a Major Design Review for a 41 unit multi-family housing project based on the ability to make all of the required findings per section 20.614.040 and the information contained in the staff report.



Franklin "Harry" Ernst "Architect (CA), Class I School Inspector (CA Division of State Architect)

April 14, 2015

Douglas County Planning Commission Douglas County, Nevada 1594 Esmeralda Ave. Minden, NV 89423

Ref: Appeal (AP) 15-003

Esplanade at The Ranch, The Ranch at Gardnerville DA 14-047, Major Design Review

My name is Franklin "Harry" Ernst.

Members of the Douglas County Planning Commission, planning staff, Douglas County District Attorney representative, neighbors, interested members of the public:

I am the appellant in this matter. I have handed out copies of my presentation for you and staff in order so that you can follow along. Copies are available here for my neighbors and interested members of the public.

The proposed multi-family project has changed significantly after the last review by the Gardnerville Town Board in January.

In the "Statement of Justification" I have described many deficiencies of the proposed project. A copy is attached at the end of the handout material. I hope you have had a chance to read and consider what I have written.

Today's presentation will focus on the following areas specified in Title 20 of the Douglas County Code:

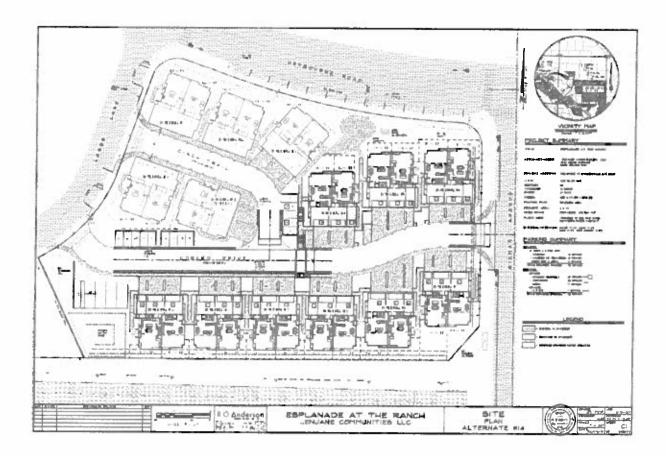
- 1) Code Section 20.656.010 Minimum Development Standards; Residential district development standards (Table).
- 2) Code Section 20.660.100 Parking, Residential uses
- 3) Code Section 20.664.120 Multi-family housing (multi-family zoning district).
- 4) Code Section 20.100.090 Roadway facilities
- 5) Division 2, Streets and Traffic (Douglas County Design Criteria and Improvement Standards) 2.6 Right-of-Way and Easements
  - 2.12.10 Private Streets
- Douglas County Standard Detail for Public Works Construction Local Road Section, DC AO2
- 7) Part 1 Section 2 Subdivision and Parcel Map Design (D.C. Design Criteria & Improvement Standards)
  - 2.3.11 Private streets
  - 2.5.2 Sidewalks
  - 2.6 Open Space

1513 Lasso Lane Gardnerville, NV 89410

Telephone = 707/643-5100 email = harryernst@ao3news.cnc.net

- 8) Part 1 Section 4 Multi-Family Residential (D.C. Design Criteria and Improvement Standards)
  - 4.1.2 Street frontage
  - 4.2.2 Driveways
  - 4.10.1 Architectural style
  - 4.10.8 The planes of exterior walls
  - 4.18 Walls and Fences
- 9) Alleys
- 10) "Statement of Justification" for Appeal of Decision, Esplanade at The Ranch, The Ranch at Gardnerville DA 14-047, Major Design Review
- 11) Planning Department Staff Report

The following has been organized with divider tabs. Specific areas of the code have been highlighted.

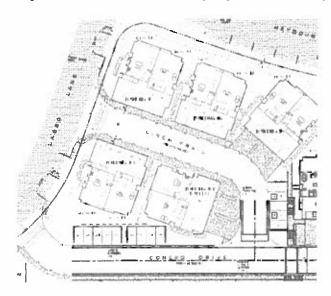


20.656.010 Minimum Development Standards Residential district development standards (Table).

#### 20.656.010

Minimum Development Standards Residential district development standards (Table).

Minimum Development Standards for yard setbacks are clear. The Table at right shows the minimum County Standards. Many of the buildings in the proposed plan, shown below, do not comply with these standards. The Table says "Yard Setback." The project summary plan refers to "Building Setbacks."



#### PROJECT SUMMARY

APPLICANT/OWNER: JENUANE COMMUNITIES, LLC.
18/24 NEDGE PARGIAY
RENO, NEVADA 64811

PROJECT ADDRESS: THE RANCH AT GARDNERVILLE LOT VICE

ESPLANADE AT THE RANCH

A.P.N.; 1520-83-210-069
SECTION: 83
TOWNSHIP: 18 NORTH
RANGE: 20 EAST

ZONING: SFR 8,000 PD 4 MFR PD MASTER PLAN: RECEIVING AREA

PROJECT AREA: 2.9 AC

CPEN SPACE: PROVIDED: 29, 968 5.F.
FLOOD ZONE: UNSHADED 'X' PER MAP PANEL
B200003866 DATED 01/20/2010

BUILDING SETBACKS: FRONT ID-FT, REAR ID-FT, SIDE ID-FT, SIDE STREET ID-FT

#### Chapter 20.656 Residential Districts

#### 20.656.010 Residential district development standards (Table).

Minimum Development Standards	SFR-T 3,000 <sup>5</sup>	SFR-T 4,000	SFR-T 6,000 = 7	SFR-T '8,000'	SFR- 8,00 0	SFR- 12,00 0	SFR- 1/2	SFR- 1	SFR- 2	MFR	RA- 5	RA- 10
Lot Area Maximum Density/Gross Acre	14.52	10.89	7.26	5.51	5.51	3.61	2	1	<b>0.</b> 5	161	0.2	0.1
Minimum Net Lot Acre (square feet)	3000	4000	6000	8000	8000	12000	21780	1 ac	2 ac	90004	5 ac	10 ac
Average Lot Width (feet) Average Corner Lot Width (feet)	30	40	60	70	70 77	100	100 120	120 120	150 150	60 66	200 200	300 300
Minimum Lot Depth (feet)	30	40	60	70	100	100	100	100	150	100	250	300
Front Yard Setback (feet)	8	10	10	12	20	20	30	30	30	10	30	30
Rear Yard Setback (feet) <sup>2, 3,</sup>	10	10	10	10	15	20	30	30	30	10	30	30
Side Yard Setback (feet) <sup>3, 4</sup>	0	5	5	5	5	10	10	20	20	10	20	20
Side Yard Setback, Street Side (feet)	5	5	10	10	15	15	20	30	30	10	30	30
Distance Between Buildings (feet) <sup>3, 4</sup>	10	10	10	10	10	10	10	10	10	10	10	10
Maximum Structure Height (Feet)	35	35	35	35	35	35	35	35	35	35	35	35

TITLE 20-177

(December 4, 2014)

- <sup>5</sup> For reverse corner lots, the rear yard setback may be reduced to that of the side yard setback in the respective zoning district
- <sup>6</sup> No project proposing attached housing or establishment of single-family residential traditional3,000 or 4,000 zoning districts is allowed in the Towns of Minden and Gardnerville unless the project is a planned development.
- <sup>7</sup> See chapter 20.664 for single-family residential traditional requirements.

(Ord. 1308, 2010; Ord. 1293, 2009; Ord. 1253, 2008; Ord. 1167, 2006; Ord. 1053, 2003; Ord. 862, 1998; Ord. 801, 1997; Ord. 763, 1996; Ord. 641, 1994; Ord. 524, 1990; Ord. 203, 1973; Ord. 167, 1968)

<sup>&</sup>lt;sup>1</sup> Projects that are ten units or greater in size in this zoning district are subject to the affordable housing provisions of this code. Density bonus units may be available (*See* chapter 20.440).

<sup>&</sup>lt;sup>2</sup> For parcels adjoining alleys, the yard setback adjoining the alley may be reduced to a minimum of three feet.

<sup>&</sup>lt;sup>3</sup> See chapter 20.664 for accessory dwelling and accessory structure requirements.

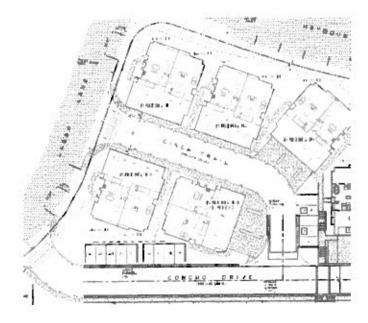
<sup>&</sup>lt;sup>4</sup> For multi-family residential projects, the minimum net lot area includes all common areas, parking, landscaping and building areas associated with a project for the purpose of creating building envelopes or condominium units.

20.660.100 Parking, Residential uses

20.660.100 Parking, Residential uses

Minimum parking requirements are shown in the County table shown on the opposite page. The numbers are clear except for a typo.

The current proposed multi-family residential plan would make it more convenient for residents to park on the public streets. Some units would be a few feet away from the curbs on Lasso Lane.



Use (ap defined in chapter	wardin space tradition (#	Leveling Sparks Contract
.090 Recreation uses (cont.)		The second of th
(G) Non-motorized racing facility	Determined with design review	Determined with design review
(H) Outdoor recreation, for day use	One per 200 sq. ft. of active area	None
<ul><li>(I) Outdoor recreation, for night use</li></ul>	One per 200 sq. ft. of active area	None
(J) Park or play field, for day use	Determined with design review	None
(K) Park or play field, for night use	Determined with design review	None
(L) Public recreation center	One per 200 sq. ft. of active area	None
(M) Ski area	Determined with special use permit	Determined with special use permit
.100 Residential uses		
(A) Boarding House	One per bedroom	Mana
(B) Clustered development	As required per use	None None
(C) Manufactured home park	Two per unit, one of which must be covered, plus one quest space per four units NOTE: tandem parking is allowed	None
(D) Multi-family dwelling	Two per unit, one of which must be covered, plus ne guest space per four units	None
(E) Single-family dwelling	Two covered parking spaces	None
110 Retail and personal service	72 H000	
(A) Bank	One per 300 sq. ft.; three stacking parking spaces are required for each drive up window or station	None
(B) Bar	One per 75 sq. ft.	First one required at 10,000 sq. ft.
(C) Building material or garden store	One per 250 sq. ft. of sales area	First one required at 10,000 sq. ft.
(D) Convenience store	One per 200 sq. ft.	First one required at 3,000 sq. ft.
(E) Indoor theater	One per 35 sq. ft. for non-fixed seats or one per four fixed seats	None

(continued on next page)

Franklin "Harry" Ernst "
Architect (CA), Class I School Inspector (CA Division of State Architect)

20.664.120 Multi-family housing (multi-family zoning district).

#### 20.664.120

Multi-family housing (multi-family zoning district).

Useable open space for passive and active recreational uses is less than the required 25%.

The lot size indicated on the plan is 2.91 acres. An acre is 43, 560 square feet. 2.91 acres equals 126,759.6 square feet.

The proposed plan indicates 29,963 sq. ft. of "useable space." 29,963 divided by 126,759.6 equals 23.63 %.

The useable open space requirement of 25% has not been met. It is not clear what is used as useable open space: storm water pond, the isolated landscape area at the northeast corner of the site, other.

#### PROJECT SUMMARY

**ナ**バナレビ。

ESPLANADE AT THE RANCH

APPLICANT/OWNER

JENUANE COMMUNITIES, LLC.

18124 HEDGE PARKHAY RENO, NEVADA 84511

PROJECT ADDRESS: THE RANCH AT GARDNERVILLE LOT WILL

A.P.N.

1820-35-210-069

SECTION

33

TOWNSHIP

13 NORTH

RANGE

20 EAST

ZONING

SFR 8,000 PD & MFR PD

MASTER PLAN

RECEIVING AREA

PROJECT AREA:

2.91 AC

OPEN SPACE

PROVIDED: 29,968 S.F.

FLOOD ZONE

UNSHADED 'X' PER MAP PANEL

3200C0255G DATED 01/20/2010

BUILDING SETBACKS FRONT 10-FT, REAR 10-FT, SIDE 10-FT, SIDE STREET 10-FT

51-100	2
101-200	3
201-300	4

One amenity shall be added for each 100 additional units or fraction thereof. (Ord. 763, 1996; Ord. 131, 1963)

\* 20.664.120 Multi-family housing (multi-family residential zoning district).

Multi-family housing within a multi-family residential zoning district is subject to design review and shall be constructed in the following manner:

A. All multi-family developments with 12 or more dwelling units must provide 25 percent of the project site as useable open space for passive and active recreational uses. Useable open space areas must not include rights-of-way, vehicle parking areas, areas adjacent to or between any structures less than 15 feet apart, setbacks, patios or private yards, or slope areas greater than 8 percent.

B. Each dwelling unit must have a private, walled patio or balcony in accordance with the following:

- 1. Ground floor units must have a patio or balcony not less than 150 square feet in area or 25 percent of the dwelling unit size, whichever is less.
- 2. All other units must have a patio or balcony not less than 75 square feet in area.
- C. All multi-family developments must provide recreational amenities within the site which may include a swimming pool, spa, club house, tot lot with play equipment, picnic shelter or barbecue area, court game facilities such as tennis, basketball, or racquetball, improved softball or baseball fields, or, day care facilities. The type and number of amenities must be approved by the director and provided according to the following schedule:

<b>Units</b>	Number of Amenities		
0-11	0		
12-50	1		
51-100	2		

Unite	
ALTERNATION OF THE PARTY OF THE	Number of
	Amenities

TITLE 20-240

101-200	3
201-300	4

One amenity must be added for each 100 additional units or fraction thereof.

D. Off-street parking spaces for multi-family residential developments must be located within 150 feet from the dwelling unit (front or rear door) for which the parking space is provided.

E. Each dwelling unit must be provided a minimum of 150 cubic feet of private enclosed storage space within the garage, carport, or immediately adjacent to the dwelling unit.

F. Driveway approaches within multiple family developments of 12 or more units must be delineated with interlocking pavers, rough-textured concrete, or stamped concrete and landscaped medians.

G. All parts of all structures must be within 150 feet of paved access for single story and 50 feet for multi-story.

H. Common laundry facilities of sufficient number and accessibility consistent with the number of living units and the current County building code must be provided.

I. Where common laundry facilities are not provided, each dwelling unit must be designed for a washing machine and dryer. (Ord. 1173, 2006; Ord. 801, 1997; Ord. 763, 1996; Ord. 347, 1980; Ord. 203, 1973; Ord. 167, 1968)

#### 20.664.125 Multi-family housing (mixed-use commercial zoning district).

Multi-family housing within a mixed-use commercial zoning district is subject to design review and shall be constructed in the following manner:

#### A. Floor area ratios:

- 1. Between 25 percent and 50 percent of the total project floor area must be devoted to commercial uses, with 50 to 75 percent of the project floor area devoted to residential uses.
  - 2. Maximum residential density is 16 dwelling units per gross acre.
- 3. Maximum building height is 35 feet for horizontal design. Horizontal design includes residential uses and commercial uses each within separate buildings. Maximum building height for vertical design (minimum first floor retail/office) is 50 feet, except as noted below. If the project site exceeds 5 percent average slopes, the maximum height may be increased to 60 feet, except as noted below. If the height exceeds 35 feet, design features to reduce roof mass must be provided.
  - a. Within the Town of Genoa, the maximum bailding height is 35 feet.
- b. Within the Towns of Minden and Gardnerville, the maximum building height is 45 feet.
- 4. Design must be architecturally compatible with and enhance the surrounding neighborhood and must properly integrate the multi-family residential and commercial uses by creating a pedestrian-oriented mixed-use environment.
  - 5. Projects with 12 or more dwelling units must provide 10 percent of the

## 20.100.090 Roadway facilities

20.100.090 Roadway facilities

Code Section 20.100.090 H.1 says "The use of private roads, which meet the specifications contained in the design criteria and improvement standards manual for a public street, is permitted upon review by the planning commission and approval by the board."

This did not happen.

Sidewalks are required by Code Section 20.100.090 i.

Dedication requirements and street widths must be per the design criteria and improvement standards.

Private roads must be designed and built in accordance with the standards set forth in the design criteria and improvement standards manual.

These requirements and others are highlighted on the following few pages.

### 20.100.090 Roadway Facilities

A. Adequate roadways. New development, with the exception of parcels created by division of land into large parcels as defined by NRS and single-family residential building permits on parcels created prior to the adoption of this title, or as provided in subsection P, shall be served by paved roadways adequate to accommodate the vehicular traffic to be generated by the development. Proposed streets shall provide a safe, convenient and functional system for traffic circulation, and shall be properly related to the county's transportation plan, road classification system, adopted master plan and any amendments thereto, and shall be appropriate for the particular traffic characteristics of each development.

B. Access roads. All developments must be connected to the county's improved thoroughfare and road system by one or more access roads of such dimensions and location approved to the standards specified in the design criteria and improvement standards manual. Requirements for dedication of right-of-way and improvement of access roads may be increased depending on the density or intensity of the proposed development. Access roads within a project shall be designed, constructed and offered for dedication in accordance with the design criteria and improvement standards manual.

C. Road network. New development shall be supported by a regional transportation network having adequate capacity, and safe and efficient traffic circulation. A traffic impact study shall be submitted demonstrating adequacy of the road network as required by the design criteria and improvement standards to accommodate traffic generated by the development, other developed property and undeveloped property approved for development. The traffic impact study shall address the issues specified in the design criteria and improvement standards manual. Improvements to roads designated by the master plan as regional in nature shall be made in accordance with the design criteria and improvement standards manual.

D. Perimeter streets. Rights-of-way for streets abutting the development shall be dedicated to the county according to the standards contained in the master plan and shall be improved to standards set forth in the design criteria and improvement standards manual. In no event shall the perimeter road have a dedicated right-of-way less than 40 feet or an improved width of less than 24 feet.

E. Continuation of roads and dead-end roads. The following shall apply to dead-end roads and roads which will be continued:

- 1. The arrangement of roads shall provide for the continuation of major roads between adjacent properties when necessary for the convenient movement of traffic, effective fire protection, or for efficient provision of utilities.
- a. If the adjacent property is undeveloped and the road must be temporarily dead-ended, right-of-way shall be extended to the property line, and the construction and maintenance of a turnaround is required for temporary use, with a notation that land outside the normal road right-of-way shall revert to abutting property owners whenever the road is continued.
- b. Where a road does not extend to the boundary of the development, and its continuation is not required for access to adjoining property, its terminus shall be no

closer than 50 feet to the boundary.

- c. Emergency access shall comply with the provisions of the road standards.
- d. The developer shall be responsible for posting a sign at the terminus of temporarily dead-ended right-of-way indicating that the right-of-way is intended to be extended in the future.
  - F. Reserve strips.
- 1. Reserve strips in the form of one foot outlots may be required to control or restrict access to perimeter or stub roads.
- 2. Such strips shall be utilized only where their ownership and control is accepted by the public agency having jurisdiction.
- 3. The outlots shall be deeded to the public agency at the time of recordation of the final map.
  - G. Road names.
- 1. Assigned road names shall be shown on the final map and must be consistent with the approved improvement plans.
- 2. Road naming shall conform to the road naming guidelines as adopted by the county.
  - (H) Private roads.
- 1. The use of private roads, which meet the specifications contained in the design criteria and improvement standards manual for a public street, is permitted upon review by the planning commission and approval by the board.
- 2. A corporation or perpetual association or other suitable means must be established for maintenance of the private road.
- I. Sidewalks. Within master plan designated urban service areas, sidewalks are required with the creation of parcels of one-half net acre or less in size and for all commercial development, and shall be constructed in accordance with the design criteria and improvement standards.
- J. Dedication requirements. Rights-of-way required for existing or future streets, including perimeter streets, and off-site access roads, shall be offered for dedication to the county or other appropriate entity according to the requirements of the master plan, capital improvements plan, or other valid plans approved by the county. Standard rights-of-way widths for county streets are as specifically set forth in the design criteria and improvement standards manual. Dedication of additional rights-of-way beyond those widths specified in the design criteria and improvement standards manual may be required at approaches to intersections, where turn lanes or other improvements are needed as required by the county engineer.
- K. Design and improvement standards. In order to provide for streets of suitable location, width and design to accommodate prospective traffic and to afford satisfactory access for law enforcement, firefighting and other public facilities and services, streets serving the development shall be designed and improved in accordance with the standards set forth in the design criteria and improvement standards manual. All streets shall be improved and paved to the width specified in and shall be designed and paved

in accordance with the specifications in the design criteria and improvement standards manual.

- L. Road facilities charges. Road impact fees shall be paid when adopted in accordance with chapter 20.300.
  - M. Access to public lands.
- 1. Legal access to public lands may not be eliminated by development over the path or way thereof.
- 2. If a trail or road plan for access to public lands is adopted by a federal agency in ownership or control thereof, and made part of the master plan, then development in the path of or adjacent to such trailheads or roads may be required to dedicate rights-of-way or other easements sufficient to secure public access to such trails or roads, provided that such dedication shall not be disproportionate to the impact of the development. The board may relieve the applicant of other dedication requirements in exchange for such access, rights-of-way, or easements, if it can do so without compromising the public interest.
- N. Cul-de-sac streets. All cul-de-sac streets must conform to the following requirements:
- 1. A residential cul-de-sac street must not serve uses, based on the ultimate permitted zoning density, which will generate more than 200 average daily trips as specified under the most recent edition of the institute of transportation engineer's trip generation manual or 20 single-family residences.
- 2. A residential cul-de-sac street must not have a center line length measured from the center pin of the cul-de-sac to the center line's intersection with the adjoining road right-of-way line, a length in excess of 600 feet in a high fire hazard area as determined by the county fire marshal or 1,000 feet in all other areas. A cul-de-sac street serving commercial or industrial properties must not exceed a center line length of four hundred feet.
- 3. A residential cul-de-sac street must have a fifty foot improved surface for the radius bulb measured from the center pin to the face of curb or edge of pavement. Commercial or Industrial cul-de-sacs must have a fifty-five foot improved surface for the radius bulb.
- 4. A residential cul-de-sac street in excess of six hundred feet must have a fifty foot improved radius builb at the midpoint of the cul-de-sac street.
- 5. All cul-de-sac streets must have the right-of-way necessary for the operation of the roadway including, but not limited to, roadside drainage, sidewalks and public utilities.
- 6. All rights-of-way and physical improvements for cul-de-sac street must include a reverse transition curve to the point of tangency.
- 7. A fire access easement is not a secondary means of access and cannot be used to waive or modify the requirements of this section.
- O. Hillside streets. Except as otherwise provided in paragraph 6 below, streets within any project proposed in a hillside area shall be designed and constructed in accordance with the following standards:

- 1. Proposed streets in hillside area must fit the natural contours of the land.
- 2. If a location of a road between a valley and a ridge is unavoidable, directional pavements should be split, with the principle of grading being half-cut and half-fill versus all fill (see figure 20.100.090.0, Appendix C). Split streets may be provided by the subdivider according to the following schedule:
- a. For one lane in each direction, the split section width of the pavement shall be 14 feet;
- b. For two lanes in each direction, the split section width of pavement shall be 22 feet. The median between split streets shall not exceed the slope of two foot horizontal for each one foot vertical; and the median shall be planted by the subdivider and maintained by the subdivider, general improvement district or property owners association, to the satisfaction of the county engineer. Lots may be located between the split pavement when approved by the county engineer.
- c. Grades of collector and minor streets may exceed 12 percent to a maximum of 15 percent for a distance not greater than 300 feet in any 2,000 feet of street length;
- d. Site visibility must conform to AASHTO/ITE standards or other acceptable standard.
- 3. The following minimum dimensions are to be utilized in the design of hillside streets:
- a. All streets shall have suitable pavement widths, sidewalks and drainage facilities per the design criteria and improvements standards.
- b. The width of the graded section shall extend three feet beyond the curb face or edge of sidewalk on the fill side and two feet on the cut side of the street.
- c. Parking lanes, eight feet in width, may be required on at least one side of all public streets except where existing topography renders development adjacent to the street impractical, or where the street serves solely as an access road, or where an adequate number of off-street parking spaces are provided on each lot adjacent to the street. Streets without parking lanes shall be provided with emergency parking stalls adequate to contain at least one vehicle per lot fronting the street.
  - d. The following travel lane widths are required in all hillside areas:
  - I. Local streets: Minor streets must have a minimum travel lane of ten
- ii. Collector streets: Collector streets must have minimum travel lane of 12 feet.
- 4. Split level, one-way streets may be permissible in areas of steep terrain when accepted by the county during project review.
- 5. Street lighting must be designed to minimize visual impacts and retain rural character while conforming to acceptable safety standards.
- 6. Modifications to these standards may be made by the planning commission and board if it can be found that the modifications further the purpose and intent of this ordinance by reducing grading and overall visual impacts while retaining acceptable traffic safety and street design characteristics as determined by the county engineer.

feet;

# Division 2, Streets and Traffic (Douglas County Design Criteria and Improvement Standards)

- 2.6 Right-of-Way and Easements
- 2.12.10 Private Streets

Franklin "Harry" Ernst <sup>III</sup>
Architect (CA), Class I School Inspector (CA Division of State Architect)

5

Division 2, Streets and Traffic (Douglas County Design Criteria and Improvement Standards)

#### 2.6 Right-of-Way and Easements

Minimum Right-of-Way widths are shown in Table 2.1. For the "local roadway" standard it is 60 feet. The proposed plan places many of the buildings in the Right-of-Way easements.

#### 2.12.10 Private Streets

Private streets shall be designed to meet all County standards for local streets, .... Refer to the Code copied in the following pages, highlighted.

.... including sidewalks. See Standard Detail DC A02

#### DIVISION 2 STREETS AND TRAFFIC

#### 2.1 General

All streets shall be improved and conform to the requirements of this manual.

#### 2.2 Standards

Design and construction of streets and related improvements shall conform to the most recent edition of the following:

- 1. "Guidelines for Urban Major Street Design," by the Institute of Transportation Engineers.
- 2. "A Policy on Geometric Designs of Highways and Streets," by the American Association of State Highway and Transportation Officials (AASHTO).
- 3. "Manual on Uniform Traffic Control Devices," by the Federal Highway Administration.
- "Guide for Development of New Bicycle Facilities," by the American Association of State Highway and Transportation Officials.
- 5. "Standard Specifications for Public Works Construction," by Regional Transportation, Commission of Washoe County, Washoe County, City of Sparks, City of Reno, Carson City, City of Yerington.
- "Access Management System and Standards," by the Nevada Department of Transportation.
- 7. "Standard Plans for Road and Bridge Construction," by the Nevada Department of Transportation.

#### 2.3 Street Widths and Alignment

Street alignments shall conform to the Douglas County Master Plan. Additional right-of-way shall be provided near intersections as required by the Community Development Department or County Engineering Division in order to facilitate turning movements. Refer to Appendix A for typical roadway cross sections.

The County may require streets with centerline offsets at intersections to be evaluated in the traffic study. However, centerline offsets of less than 125 feet are not allowed. All improvements shall be centered within the dedicated right-of-way or dedicated roadway easement.

Adjustments to the street widths, curb return radii, and other traffic calming techniques shall be considered when pedestrian safety and convenience are important. Traffic calming techniques will be considered on a case-by-case basis by the County Engineer.

#### 2.4 Access

At least two means of ingress and egress to County standards shall be provided to serve a subdivision or development of more than 20 single family residences or units, with the exception of a single cul-de-sac subdivision. A single cul-de-sac subdivision or development with 20 or less single family residences or units may be approved with only one means of access and egress. Access onto all state highways and County collectors and arterials shall comply with the Nevada Department of Transportation "Access Management System and Standards." Access onto all local streets shall comply with the provisions of

Streets and Traffic Part II Page 2-1

this manual. Local road spacing shall not be less than 225 feet centerline to centerline. Alleys which access local roads shall comply with the residential driveway spacing requirements.

#### 2.5 Off-Site Improvements

Streets or access adjacent to or necessary to serve a development which are not within the boundaries of the development but are dedicated public right-of-ways shall be improved with development to standards required by the County to promote public safety and welfare.

#### 2.6 Right-of-Way and Easements

All necessary right-of-way or easement acquisition outside the boundaries of a subdivision or development, including agreements as to access, ownership and maintenance, shall be completed at the time of submittal of application for a development permit. Right-of-way widths shall not be less than shown in Table 2.1. Required right-of-way width is typically greater than shown in Table 2.1 to comply with the Douglas County Comprehensive Trail Plan.

Functional Classification	Minimum Right-of-Way Width (feet)
Principal Anerial	80 <sup>2</sup>
Minor Arterial	80
Rural Major Collector	80
Rural/Urban Minor Collector	80 (rural), 80 (urban)
Rural/Urban Local Roadway	60 (rural), 60 (urban)

Table 2.1. Minimum Right-of-Way Widths.

#### Notes

- In fill developments where adjoining right-of-way is established may conform to the established right-of-way upon approval of the Engineering Manager/County Engineer.
- All existing principal arterial roadways in Douglas County are maintained under the jurisdiction of the Nevada
  Department of Transportation. Right-of-way for principal arterials shall be coordinated with the Nevada Department
  of Transportation and comply with their requirements.

In areas of possible fire hazards, as determined by the Fire Authority, unobstructed fire protection equipment access easements not less than 20 feet wide shall be dedicated from the public street to the subdivision or development boundary. Permanent emergency access shall be designed and constructed to comply with the requirements of Section 2.12.14 Emergency Access Roads.

Right-of-ways shall be cleared of all brush, trees, stumps, or other debris except that sound trees twelve inches or more in diameter may be left standing in accordance with the approved set of improvement plans.

#### 2.7 Streets Along Property Boundaries

Streets must not be located along property boundaries unless required by a County adopted street pattern or shown as a master plan street. A proposed access street lying along a boundary, which is within the development or off-site but within an easement already dedicated to the County, must be dedicated and constructed full width to County standards, including curb, gutter and sidewalk. A proposed street lying along the boundary of a development or subdivision, which is within the development or is off-site within an easement dedicated to the County, that is impacted by that subdivision or development must be dedicated and constructed by that subdivision or development. If the proposed street, which is in the

Streets and Traffic Part II Page 2-2

#### 2.13.8 Curb Returns

Curb returns shall have minimum back of curb radii of 25 feet on urban local streets (35 feet on rural local streets), 35 feet on urban minor and major collector streets (35 feet on rural collector streets), 35 feet on minor arterial streets, and 45 feet on principal arterial streets. Curb returns shall be used at commercial driveways. Curb returns will not be allowed at residential driveways.

#### 2.13.9 Bicycle Lanes and Bicycle Routes

The design of bicycle lanes, bicycle routes, and bicycle paths shall conform to the AASHTO "Guide for Development of Bicycle Facilities," County ordinance, "Standard Specifications for Public Works Construction," and this section. Bicycle lanes and bicycle routes shall be constructed at locations designated in the Douglas County Comprehensive Trail Plan, and shall include bicycle lane or bicycle route signs in accordance with the MUTCD.

The minimum width for bicycle lanes shall be 5 feet as measured from the edge of pavement or face of curb. If the longitudinal joint between the gutter lip and the roadway surface is within 5 feet of the curb face, a minimum of 4 feet shall be provided between the longitudinal joint and the motor vehicle lanes.

#### 2.13.10 Bicycle and Pedestrian Paths

The design of bicycle and pedestrian naths shall conform to the AASHTO "Guide for Development of Bicycle Facilities," County ordinance, "Standard Specifications for Public Works Construction," and this section. Bicycle and pedestrian paths shall be constructed at locations designated in the Master Plan.

The minimum width for two-directional bicycle and pedestrian paths shall be 10 feet. All bicycle and pedestrian paths shall be designed as two-directional facilities. All bicycle and pedestrian paths shall have a minimum 2-foot wide graded shoulder which consists of a minimum of four inches (4") of Type 2 Class B aggregate base.

#### 2.13.11 Obstructions

No obstruction, such as power poles, street lights, signal poles and controls, sign posts, water meter boxes, pull boxes, mail boxes, etc., shall be located within public sidewalks or pedestrian paths. Necessary additional right-of-way that may be required for locating such facilities at the back of sidewalks shall be dedicated, or easements provided to the County or utility purveyor by the developer.

Where obstructions exist in areas of proposed improvements, the developer shall relocate existing obstructions out of sidewalk and pedestrian areas, and other areas of improvements. Obstructions shall not be located at intersections or other locations that interfere with sight distance.

#### 2.13.12 Cut and Fill Slopes

Cut and fill slopes shall be set back a minimum of two feet (2') from the back of the sidewalk. If no sidewalk exists the setback shall be a minimum of six feet (6') from back of curb. Back of curb drainage shall be installed as necessary. If slopes extend outside the right-of-way, slope easements shall extend at least two feet beyond where the natural surface of the ground must be excavated or covered with fill dirt or materials in constructing cuts, fills, curb and gutter, sidewalk, and drainage improvements. Design of cut and fills slopes shall also comply with the International Building Code.

#### 2.13.13 Alleys

Alleys required to serve a development shall be improved and conform to County standards. Alleys shall have a minimum right-of-way width of 24 feet, minimum pavement width of 20 feet, and comply with County drainage requirements.

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#### 2.13.14 Alley Grades

Longitudinal grades shall conform to standards for streets, with a cross slope of 2.0% minimum from the property line toward the center of the alley, or with a cross slope of 2.0% minimum from one side of the alley to concrete curb and gutter on the low side of the alley.

#### 2.14 Traffic and Impact Study Requirements

#### 2.14.1 General

Traffic engineering and impact studies are required for the purpose of analyzing the impacts of development or improvement on the existing transportation system. The transportation system is composed of primarily surfaced streets, but also includes elements such as pedestrian paths, bike paths and lanes, bus routes, highways or other means of transportation. Traffic englneering studies shall be prepared and submitted to the County to identify and mitigate traffic impacts of development activity. All traffic studies for proposed development on now vacant land shall be prepared based on Douglas County Master Plan land uses and densities.

Traffic engineering studies shall be presented in written format, accompanied by appropriate drawings, plans, or maps needed to clearly present the material. The study shall clearly list all assumptions and criteria upon which the analysis is based. All references shall be listed by author, publications, name and date. Traffic engineering studies are required if one or more of the following conditions are met:

- 1. The proposed development will generate 80 or more peak hour trips (the sum of all exiting trips plus all entering trips) as determined using the Institute of Traffic Engineers (ITE) trip generation rates or other such sources accepted by the Engineering Division.
- The proposed development will generate 500 or more trips per day.
- 3. The proposed development contains phasing, and impacts from the cumulative phasing have net effects of items 1 or 2. In this case, a traffic study shall be required with the first phase of the development.
- 4. The Engineering Division determines that a traffic study is required. For example, a Traffic Engineering Study may be required for small developments that do not satisfy one of the above requirements if they are near a school, community shopping or recreation area, near a historic area, or will generate truck traffic. On small developments, the Engineering Division may require an analysis of the proposed access, safety issues, and the internal street system or parking.
- 5. The proposed development contributes to the need for traffic and/or signal improvements.

#### 2.14.2 Scope of Work and Method

The Engineering Division will approve the scope of work and method of analysis prior to the start of any traffic engineering study. For all projects located within the Town of Minden, Town of Gardnerville, or a GID, a scoping meeting with the County Engineering Division and respective Town or GID shall be conducted prior to the start of any traffic engineering study. All traffic engineering studies shall be prepared by, or under the direct supervision of, a professional engineer licensed in Nevada with adequate experience in transportation or traffic engineering. The study area shall include all portions of the transportation network that the Engineering Division or the traffic engineer believe may be affected

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#### 2.12.10 Private Streets

Private streets shall be designed to meet all County standards for local streets. Street lights, storm drain systems, water systems, and sanitary sewer systems located within a private street shall be constructed to County standards and shall be supported by separate public utility easements. At the intersection with public streets, a standard size and design traffic sign shall be installed which says "PRIVATE STREET NOT MAINTAINED BY COUNTY."

#### 2.12.11 Asphalt Concrete Structural Sections

Design of the structural section for asphalt concrete pavement shall conform to the AASHTO "Guide for Design of Pavement Structures," 1993 edition. Inputs to the design procedure shall be developed in accordance with the following:

1. Roadbed Soil. Roadbed soil testing shall be performed to determine the design roadbed soil resilient modulus, M<sub>r</sub>, for use in the design charts. The design roadbed soil resilient modulus, M<sub>r</sub>, shall be determined from the resilient modulus test or correlated with test results from the Resistance (R) Value test. Correlations between resilient modulus, M<sub>r</sub>, and the Resistance (R) Value shall be in accordance with the AASHTO "Guide for Design of Pavement Structures" for Resistance (R) Values less than 20, or Figure 6.2 of the Nevada Department of Transportation Pavement Structural Design and Policy Manual.

Sufficient tests shall be made to evaluate each different soil type in the project. If significant roadbed soil variation is present, sufficient tests shall be made to determine the controlling (weakest) soil type, or the limits and boundaries of each roadbed soil type. The minimum number of R-value test and maximum spacing between tests are as follows:

Design Traffic Level Cumulative ESAL's Over the Design Period	Minimum No. of R-Value Tests per Soil Type	Maximum Spacing for R-Value Tests along Roadway Alignment (feet)		
< 10,000	1	1,000		
10,000 to 1,000,000	3	750'		
> 1,000,000	3	500¹		

#### Notes:

R-value tests may be spaced further apart if the project does not have significant earthwork
or structures and a geotechnical investigation confirms the presence of uniform subsurface
conditions. In all cases a minimum of three R-value tests per mile or three within the project
boundary are required.

The design roadbed soil resilient modulus, M<sub>r</sub>, shall be based on the results of R Value tests, and shall be determined as a function of the design traffic level, using lower design values when higher traffic levels exist. Percentile design values (select the design modulus such that X percent of all test values are less than the design modulus) for various traffic levels shall not be less than the following:

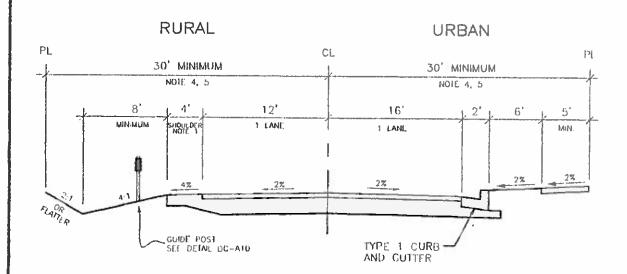
# Douglas County Standard Detail for Public Works Construction - Local Road Section, DC AO2

Franklin "Harry" Ernst "Architect (CA), Class I School Inspector (CA Division of State Architect)

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**Douglas County Standard Detail for Public Works Construction Local Road Section, DC AO2** 

The "Local Road" Section, drawing DC A02 is shown on the opposite page. For an urban area 30 feet is the minimum from the center of the street. Sidewalks should be on both sides of the street. Private streets are to be designed and constructed with these standards, as described in the code. See Code Section 2.3.11 Private streets.



- 1. ACCREGATE SHOULDERS SHALL HAVE A MINIMUM OF 6 INCHES OF AGGREGATE BAS
- STRUCTURAL SECTION TO BE DETERMINED BY ENGINEERING DESIGN, BUT IN NO CASE SHALL THE ASPHALT CONCRETE BE LESS THAN 3 INCHES THICK AND THE AGGREGATE BASE LESS THAN 6 INCHES THICK.
- 3. TYPE 3 PLANTMIX BITUMINOUS PAVEMENT WITH PG 64-28 NV SHALL BE USED ON THE TOP 3 INCHES. TYPE 2 OR TYPE 3 PLANTMIX BITUMIOUNS PAVEMENT WITH PG 64-28 NV SHALL BE USED ON LOWER PAVEMENT LIFTS.
- 4. DRAINAGE AND IRRIGATION SYSTEMS SHALL BE ACCOMMODATED ON ADJOINING PROPERTY BY PERMANENT EASEMENT OR BY ADDITIONAL RIGHT-OF WAY.
- 5. PERMANENT SLOPE EASEMENTS MAY BE REQUIRED TO ACCOMMODATE CONSTRUCTION OF THE ROADWAY AND DRAINAGE FACILITIES
- 6. BIKE LANES SHALL BE PROVIDED IN ACCORDANCE WITH THE DOUGLAS COUNTY COMPREHENSIVE TRAIL PLAN, BIKE LANES IN RURAL AREAS SHALL BE 5 FEET WIDE AND CONSTRUCTED WITH THE SAME STRUCTURAL SECTION AS THE ROADWAY WHERE THE BIKE LANE IS ADJACENT TO CURB AND CUTTER, THE BIKE LANE SHALL HAVE A MINIMUM 4 FOOT WIDTH MEASURED FROM THE TRAFFIC LANE TO THE LONGITUDINAL JOINT BETWEEN THE GUTTER PAN AND ROADWAY SURFACE,
- 7. BIKE LANES AND BIKE ROUTES SHALL BE SIGNED AND STRIPED IN ACCORDANC WITH THE AASHTO "GUIDE FOR THE DEVELOPMENT OF B CYCLE CONTROL FACIL IS" AND THE FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

NO.	REVISION	DATE	STANDARD DETAIL	FOR PUBLIC	WORKS C	CONSTRUCTION	SECTION	٧
							DOUGLA	S COUNTY
			LOCAL	POAD	SEC	TION	DATE:	6/07/2007
<u> </u>			LOCAL	KOAD	SEC		2111	
							DWG:	DC A02

# Part 1 Section 2 - Subdivision and Parcel Map Design (Douglas County Design Criteria and Improvement Standards)

- 2.3.11 Private streets
- 2.5.2 Sidewalks
- 2.6 Open Space

Part 1 Section 2 - Subdivision and Parcel Map Design (Douglas County Design Criteria & Improvement Standards)

#### 2.3.11 Private streets

Private streets shall be constructed to County standards ...

#### 2.5.2 Sidewalks

Sidewalks are to be provided on each side of a street ...

#### 2.6 Open Space

Open spaces are to be centrally located. The proposed plan shows the project amenity and open space in an isolated area at the northeast corner of the site.

#### 1. PURPOSE AND APPLICABILITY

The criteria within this chapter provide design standards for parcel maps, subdivision maps, planned unit developments, accessory buildings for single-family residential uses and multi-family residential projects.

The standards are complementary to the development regulations contained within the Douglas County Consolidated Development Code. These criteria will be utilized during the County's review of residential parcel and subdivision maps, planned unit developments, multi-family projects and building permits for accessory buildings. The guidelines are to be used as a reference when designing projects and buildings by residents and design professionals when developing plans.

This Section is divided into the following sections:

Section 2 - Subdivision and Parcel Map Design

Section 3 - Single-Family Residential

Section 4 - Multi-Family Residential

#### 2. SUBDIVISION AND PARCEL MAP DESIGN

The following design standards are intended to promote development of neighborhoods which are cohesive, functional and create a sense of community. Emphasis should be given to promoting interaction within and between neighborhoods, and linkages within community facilities and the neighborhoods they serve. It is essential that planning and design extend beyond the boundaries of an individual project. The focus should be on geographic areas that encompass an entire neighborhood, rather than arbitrarily limiting the scope of design and review to individual project boundaries.

#### 2.1 General

- 2.1.1 Projects should be designed to promote an attractive and functional living environment for all parcels within the subdivision/parcel map.
- 2.1.2 Through lots which create double frontages should be avoided.
- 2.1.3 Grading concepts shall be utilized that respect the natural terrain and minimize grade differential interference with adjacent properties.
- 2.1.4 When significant slopes are present between abutting properties, rear and side property lines shall be located at the top of the slope in order to avoid maintenance problems.
- 2.1.5 Remnant strips of undevelopable land within the subdivision shall be avoided. Undevelopable parcels may contribute to future maintenance problems resulting in unsightly areas and blight.
- 2.1.6 Subdivision design shall consider a comprehensive approach to minimize impacts with potentially incompatible land uses and to preserve environmentally sensitive areas from urban

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- development. The use of streets and landscape parkways/buffers should be considered as a method to soften abrupt changes in land uses.
- 2.1.7 The local street layout should permit economical development of land and efficient lot layout, both on the subject property and on adjacent properties.
- 2.1.8 Design of a project should be evaluated against existing land use/street patterns, proposed/approved projects and overall consistency with the Master Plan.
- 2.1.9 To enhance buffering, the area of the lots abutting parks, schools, and/or commercial sites, should be increased by at least 10% over the average lot size within the subdivision.
- 2.1.10 Postal service cluster boxes shall be incorporated into the project design. The area around the cluster boxes should be paved and have direct access from the sidewalk and street. The postal boxes shall be incorporated within a structure with a roof to the extent feasible. Recessed lighting within the structure shall be provided.

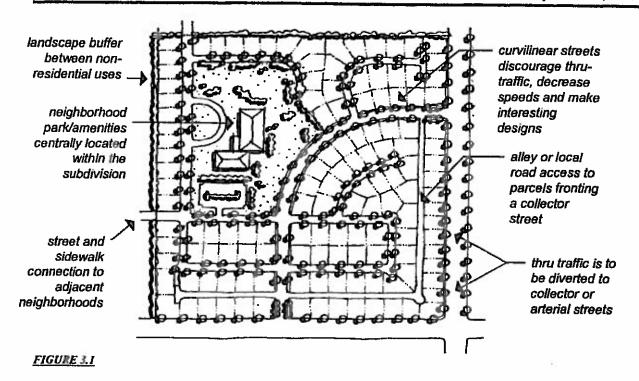
#### 2.2 Lot Design

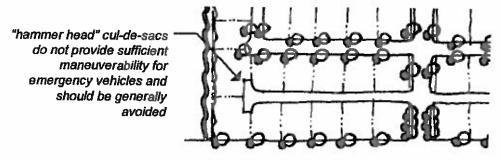
- 2.2.1 The design and placement of a lot shall consider its functionality once it is developed. Unusually shaped lots which create unusable areas (low angle acute corners, excessive slopes) are to be avoided.
- 2.2.2 All lots shall be designed and dimensioned to meet the minimum required setbacks of the respective zoning district.
- 2.2.3 Projects containing 10 or more residential lots of one-half acre or less should have varied lot widths of at least 10% along the parcel frontage. Lot widths shall be consistent with the provisions of Title 20.
- 2.2.4 Projects creating parcels of less than one-half acre in area, should not include flag lots and lots which side on the rear of other lots.

#### 2.3 Streets

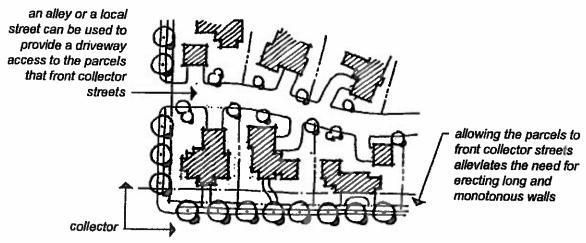
- 2.3.1 Local street patterns shall provide access between adjacent neighborhoods. Through traffic is to be directed to collector and arterial streets. (see Figure 3.1)
- 2.3.2 The street system should be designed to avoid creating local streets which will ultimately function as collectors.
- 2.3.3 The local street system should be logical and understandable for the user. The use of "dog leg", "hammer head" cul-de-sacs and one-way streets shall be avoided. (see Figure 3.2)

Residential





- 2.3.4 Local street design should provide efficient connection to the collector and arterial street system while discouraging excessive speeds within the neighborhoods. (see Figure 3.1)
- 2.3.5 The street pattern shall take into account avoidance of creating through-lots between streets. In cases where parcels front two streets, collector road access to these parcels should be avoided. Access alleys, should be considered and may be required. Lot design should eliminate the need for utilization of perimeter walls along roadways which create "walled communities".

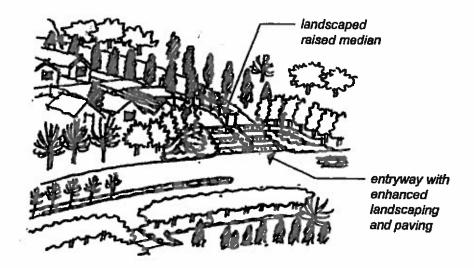


- FIGURE 3.3
- 2.3.7 Individual subdivisions should integrate with adjacent developments with respect to street design including access points, pedestrian connections and landscape buffers.
- 2.3.8 Phasing of street and sidewalk improvements within a subdivision shall consider adjacent properties and/or subdivisions.
- 2.3.9 Streets and intersection design shall promote efficient and safe circulation and emergency access.
- 2.3.10 All subdivisions shall provide adequate emergency access, and meet all emergency services' requirements.
- 2.3.11 Private streets shall be constructed to County road standards, where permitted.
- 2.3.12 Street system design shall function safely and effectively without the subsequent need for excessive traffic devices to control traffic.
- 2.3.13 Streets shall be designed to provide sufficient access and circulation needs of alternative modes of transportation including public transit, school buses, pedestrians, bicycles and recreational trails. Streets are to provide adequate maneuverability for public transit, school buses and avoid conflict with pedestrians and bicycles.

# 2.4 Streetscape

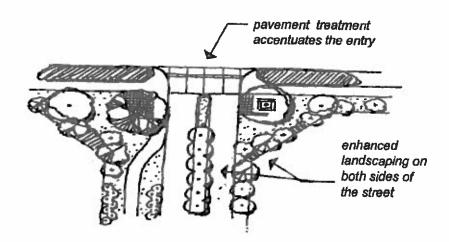
2.4.1 In subdivisions creating 50 or more residential lots of one-half or less, enhanced entrance(s) must be provided at the streets serving as entrances to the subdivision. This can be accomplished by the use of a center median, enhanced landscaping, fountains and/or ponds, and interlocking pavers stamped concrete or cobbles within the roadway. (see Figures 3.4 and 3.5)

2.4.2 Collector roads within subdivisions should have a raised median, constructed to County standards. The median shall contain landscaping and pedestrian crosswalks.



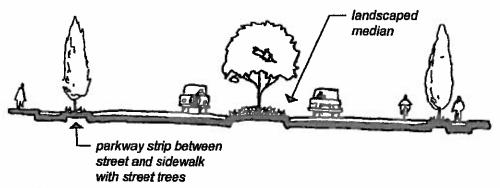
### FIGURE 3.4

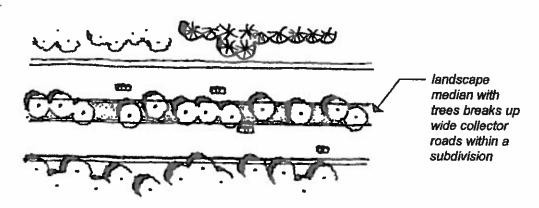
2.4.3 If a raised median is proposed, the landscaping shall include a mix of deciduous an evergreen trees planted on average of 40 feet on center. Combinations of sod, wild grasses/flowers, shrubs, perennials, annuals, river rock and/or walk-on bark shall be used as ground covers. (see Figures 3.5 and 3.6)



Residential

FIGURE 3.5





### FIGURE 3.7

- 2.4.4 In subdivisions where fencing and/or masonry walls are used to screen lots from roads, a contiguous landscape planter, a minimum of 5 feet in width shall be provided. The planter shall include a mix of deciduous and evergreen trees planted on average of 40 feet on center, and may include a combination of sod, shrubs, river rock and or walk-on bark. Wall design shall be consistent with the development code.
- 2.4.5 All landscaping shall be properly irrigated by utilizing water saving techniques set forth in Title 20.
- 2.4.6 All landscaping shall be perpetually maintained with prompt removal and replacement of dead and diseased plant material.
- 2.4.7 Maintenance of the streetscape shall be the responsibility of a homeowners association, unless another responsible party is identified, able and willing to assume responsibility at the time of tentative map approval.

# 2.5 Bicycle and Pedestrian Accessibility

- 2.5.1 Pedestrian, bicycle and equestrian (where keeping of livestock is permitted by Douglas County Code) paths shall be provided connecting common areas such as parks and schools with residential areas. (see Figures 3.8 and 3.9)
- 2.5.2 Subdivisions within designated urban areas shall provide sidewalks on each side of a street and be designed in accordance with Part II of this manual.
- 2.5.3 All sidewalks shall be ramped to access all crosswalks and be consistent with the most current Americans with Disabilities Act regulations and standards.

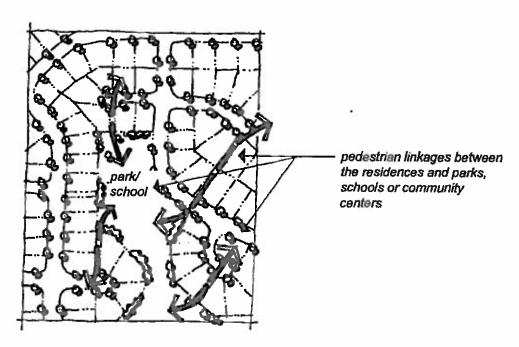
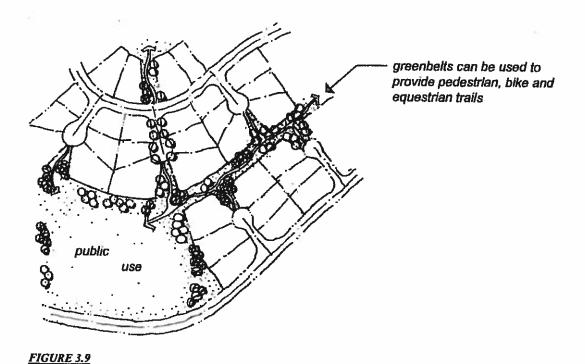


FIGURE 3.8

- 2.5.4 Where required, all crosswalks shall be placed across the full width of the pavement and be a minimum 6 feet in width. Sidewalks shall be placed to provide the shortest direct link between curbs.
- 2.5.5 Bicycle, equestrian and pedestrian routes/paths shall be provided throughout the subdivision and provide linkages to schools, open space areas, equestrian trails and commercial districts. If culde-sacs are utilized, bicycle and pedestrian easements shall be provided connecting streets, parks, open spaces, schools, commercial uses, etc. (see Figure 3.9)



# 2.6 Open Space

- 2.6.1 When required by Title 20, subdivisions (plan developments) shall provide open space area(s). The open space(s) are to be centrally located so that they are conveniently accessible to sidewalks or trails from all areas of the subdivision.
- 2.6.2 When an open space is required to be improved to a park like setting, a mixture of deciduous and evergreen trees shall be provided. Deciduous trees shall be planted in areas where high concentration of patrons is anticipated (i.e. picnic tables, benches, etc.) Sod, river rock, walk-on bark, annuals, perennials and shrubs must be used to create parking like landscape design. Plants shall be drought tolerant and consistent with the recommended plant list in Appendix B.
- 2.6.3 Pedestrian amenities such as benches, picnic tables, trash receptacles, gazebos, ponds, fountains, etc. shall be incorporated into the design.

### 2.7 Retention/Detention Basin Landscaping

2.7.1 Detention/retention basins proposed with subdivisions which create parcels of one-half acre or less shall be landscaped. The landscaping shall include non-buoyant landscape materials such as turf, cobble rock and low spreading ground cover shrubs. The use of buoyant material such as walk-on bark and mulch is not permitted. The landscaping shall be irrigated in accordance with Title 20.

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# Part 1 Section 4 - Multi-Family Residential (Douglas County Design Criteria and Improvement Standards)

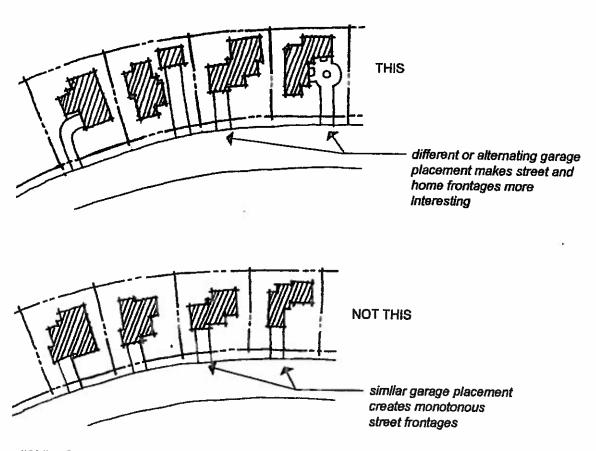
- 4.1.2 Street frontage
- 4.2.2 Driveways
- 4.10.1 Architectural style
- 4.10.8 The planes of exterior walls
- 4.18 Walls and Fences

8

Part 1 Section 4 - Multi-Family Residential (Douglas County Design Criteria and Improvement Standards)

- 4.1.2 "When the buildings along street frontage ... (public and private?)

  The building orientation and setbacks are to be varied, to avoid being monotonous. (See Figure 3.12)
- 4.2.2 "All parking areas, driveways, parking aisles and sidewalks shall be graded, drained and paved in accordance with Title 20 and Part II of this manual."
- 4.10.1 "New buildings must be compatible with the surrounding buildings ... " The proposed project plans do not do this. The architectural style, forms, shapes are very different.
- 4.10.8 "The planes of exterior walls shall be varied in depth and/or direction. ..." The proposed project will not be like this. (See Figure 3.14)
- 4.18 "The perimeter of multi-family projects adjacent to properties designated zoned or occupied by single-family residential uses shall be screened by using wrought-iron or redwood fence, masonry wall, or a combination thereof. ..." The proposed four foot fence does provide security and privacy. It will not compliment the surrounding six foot high fencing of the neighborhood.



### 4. MULTI-FAMILY

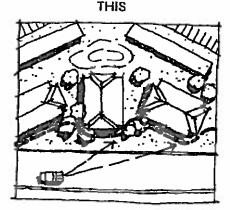
The following design standards are intended to promote interesting and unique multi-family residential designs of duplexes and complexes of three or more units. When designing a multi-family project, it is important to consider adjacent uses, topography, existing vegetation, solar and wind orientation and the overall neighborhood atmosphere.

### 4.1 Building Arrangement and Location

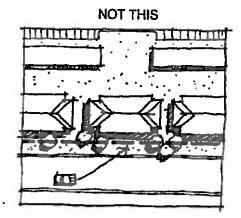
Arrangement and location of buildings often determine how the entire site will be planned and how it functions. The arrangement and location of a multi-dwelling building or buildings can create open space areas, provide convenient accessibility, and create safe and desirable environments to live in.

4.1.1 Within multi-building complexes, buildings shall be clustered creating open spaces. Where clustering is impractical, a visual link between the buildings shall be incorporated. This link can be accomplished by the use of an arcade system, trellises, pedestrian walkways, or other similar designs.

4.1.2 When the buildings are located along the street frontage, open space areas are to be provided between the buildings. The building setback and orientation is to be alternated to eliminate monotonous street frontage. (see Figure 3.12)



alternating building setbacks and orientation eliminates monotonous street frontage



placement of building parallel to the street creates monotony and is to be avoided

### **FIGURE 3.12**

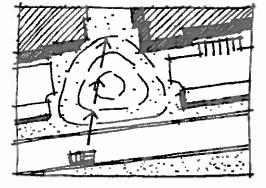
- 4.1.2 The existing natural features on a site such as trees, sloughs, slopes and rock outcroppings are to be retained and incorporated into the site layout to create more interesting and unique designs, to the extent possible.
- 4.1.3 The building location and orientation should give consideration to the sun and wind exposures, minimizing noise levels and impacts to safety and privacy. Pedestrian open space areas and walkways should be located on the south or the west sides of the building(s) so that maximum sun exposure is provided during winter months. Deciduous trees can be planted to provide shade in the summer months. Wind direction should be considered in the site design.
- 4.1.4 Storage buildings and areas shall be located in the rear of the site. The storage areas and materials shall be properly screened by the use of fences, decorative walls or other similar opaque screening fixtures consistent with Title 20.
- 4.1.5 Buildings must be arranged so that they do not create a "blind corner" and/or impair traffic safety sight area. Specific consideration must be given to corner lots and instances where there are existing and adjoining driveways.

# 4.2 Circulation and Parking

Circulation is the pattern of movement of pedestrians, vehicles and bicyclists on the site. Circulation patterns are critical in terms of public health, safety and convenience. Off-street parking is required for all projects and each project is expected to accommodate its tenants' needs.

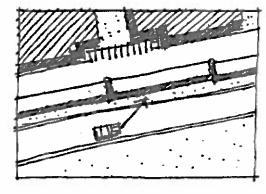
- 4.2.1 The on-site circulation must be logical and provide convenient, safe and direct flow of pedestrian and vehicular traffic.
- 4.2.2 All parking areas, driveways, parking aisles and sidewalks shall be graded, drained and paved in accordance with Title 20 and Part II of this manual.
- 4.2.3 Separate vehicular and pedestrian systems shall be provided connecting the site with the street and sidewalk system.
- 4.2.4 Parking shall be distributed throughout the complex so that it is directly accessible from all dwellings. Parking areas along the street frontage shall be broken-up with open spaces to provide "windows" into the interior of the complex and break-up the monotony of long parking aisles. (see Figure 3.13)
- 4.2.5 Connection or joint use of driveways, parking areas, etc. with single-family, commercial, industrial or institutional uses is discouraged. Whenever the project is connected with adjacent multi-family residential site, the circulation must allow for similar direction of travel and parking to reduce conflict at points of connection.
- 4.2.6 In cases where one-way traffic aisles are provided, one-way traffic signs shall be clearly posted and one-way arrows shall be painted and maintained within the drive aisle.
- 4.2.7 The turning radii for drive aisles shall meet the AASHTO standards for turning movements.

### THIS



parking area along the street frontage broken-up with open spaces

### **NOT THIS**



long parking areas along the street creates a monotonous street frontage that is to be avoided

FIGURE 3.13

- 4.2.8 Parking spaces directly abutting structures are not permitted. In cases where parking spaces face residential buildings, a dense hedge, berming or a decorative wall/fence shall be provided to screen vehicular lights.
- 4.2.9 Interior sidewalks must be a minimum of 4-feet in width. When parking stalls directly abut a sidewalk, the sidewalk shall be a minimum of 6-feet in width. If exterior stairways are used with the stairway landing on the sidewalk, the sidewalk shall be a minimum of 6-feet in width.
- 4.2.10 In cases where parking areas or drive aisles abut single-family uses or zoning designations, a 6-foot high solid masonry wall shall be provided.
- 4.2.11 Interior drive aisles shall be designed to provide appropriate circulation and maneuverability for emergency vehicles.
- 4.2.12 All parking spaces shall be consistent with the most current Americans with Disabilities Act (ADA) regulations and standards.

### 4.3 Vehicular Access

- 4.3.1 Access points shall be kept to a minimum; however, the number and location of driveway curbs shall be adequate to allow efficient traffic flow. Joint access between adjacent multi-family sites is to be utilized whenever possible to reduce traffic hazards and necessary curb cuts. Joint access with commercial, industrial or institutional uses is discouraged.
- 4.3.3 Driveways are to be designed and located so that the vehicles have sufficient visibility and maneuverability. All driveways must meet the AASHTO standards for turning movements.
- 4.3.4 The spacing between driveways and intersection corner clearance shall be consistent with the standards provided in Part II of this manual.
- 4.3.5 Pavers, stamped concrete or other similar treatment are to be used to denote driveway approaches.
- 4.3.6 Buildings having direct driveway access from the street shall have a minimum driveway length of 20 feet so that vehicles parked within the driveway do not obstruct the sidewalk.

### 4.4 Pedestrian Access

- 4.4.1 Pedestrian linkages between uses within the development such as swimming pools, recreation rooms and/or laundry rooms shall be provided. Design features such as walkways with enhanced paving, trellis structures, or special landscaping/hardscaping treatments are to be provided.
- 4.4.2 A direct pedestrian access from the street to the project is required. Special consideration must be given to projects abutting neighborhood commercial uses such as grocery/convenience stores, restaurants, parks, schools, etc.
- 4.4.3 A continuous on-site pedestrian walkway must be provided from the perimeter public sidewalk.

4.4.4 All pedestrian areas shall be consistent with the most current Americans with Disabilities Act (ADA) regulations and standards.

# 4.5 Landscaping - General

Landscaping is a major factor in the image of an area. Plants can perform a number of functions to enhance the site. Landscaping can be used to screen unattractive views, create distinguished entry ways and exits, create pedestrian spaces, reduce heat and glare, mitigate soil erosion, provide buffering between incompatible land uses, soften architectural lines and mitigate noise. These issues should be considered when designing a landscape plan. All landscaping shall comply with the minimum standards provided in the Consolidated Development Code.

- 4.5.1 Plants used in project landscaping shall be consistent with the recommended plant list contained in Appendix B in Part I of this manual.
- 4.5.2 Existing trees and natural features should be preserved and incorporated into the landscaping plan to the extent possible. Natural areas are not be disturbed during grading and construction activity.
- 4.5.3 Concrete mow strips, header boards or other similar materials shall be used to separate different ground covers.
- 4.5.4 Landscaping is to be used to define specific areas within a complex such as the entrance, transition between neighboring properties, and defining of open space and common areas.
- 4.5.5 Plants are to be in scale with adjacent structures and be of appropriate size to accomplish intended purposes.
- 4.5.6 Landscaping shall be perpetually maintained with prompt removal and replacement of dead and diseased plants.
- 4.5.7 Deciduous trees should be used in planter areas that are designated to provide shade such as open space areas. Evergreen trees are intended for screening and provide color in winter months.

# 4.6 Landscaping - Parking Lot

- 4.6.1 Parking areas abutting a public street and/or sidewalk shall provide a linear landscape planter a minimum width of 10-feet.
- 4.6.2 The landscape planter between the parking lot and the street should include a solid masonry wall, berm or hedge to screen vehicular lights or combination of elements.

# 4.7 Landscaping - Site Perimeter

4.7.1 Perimeter planters must use a combination of turf and plants such as shrubs, perennials and annuals.

4.7.2 Unless adjacent sites are integrated (shared parking, access, drive aisles, etc.) perimeter landscaping along all property lines is required. The landscaping planter area shall be minimum a of 6-feet in width. The landscape planters shall be separated from the adjacent properties by the use of a concrete curb or a redwood header board (minimum one inch thick).

# 4.8 Landscaping - Interior Open Space

- 4.8.1 Deciduous trees shall be used in areas where concentration of residents is anticipated (i.e. picnic tables, seating benches, etc.) in order to provide shading. Gazebos and other similar structures are highly recommended and may allow for reduction of trees within the areas.
- 4.8.2 Turf shall cover a minimum of 50% of the required open space area(s). Other ground covers (i.e. river rock, walk-on bark, shrubs) should be used to provide interesting landscape designs. Plants with thorny barks should be avoided.

# 4.9 Landscaping - Detention/Retention Basins

- 4.9.1 If the project proposes to utilize on-site retention/detention basins, the basins shall be landscaped. The landscaping shall include non-buoyant landscape materials such as turf, cobble rock and low spreading ground cover shrubs. The use of buoyant material such as walk-on bark and mulch is not permitted. The landscaping shall be irrigated in accordance with Title 20.
- 4.9.2 The landscape design shall provide adequate access for maintenance of the basin.
- 4.9.3 Basins which are landscaped with turf, the ponds may be used as a open space area for the development.
- 4.9.4 Basins facing public rights-of-way shall be fenced by using wrought iron.

### 4.10 Building Design - General

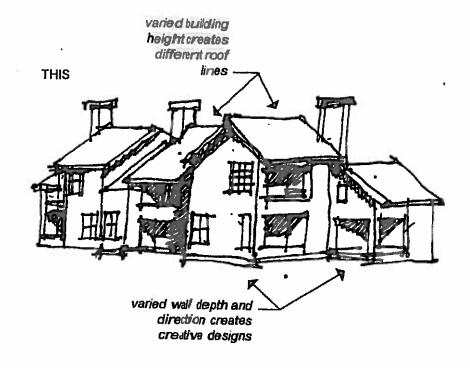
Building design is an integral part of multi-family development of any size. The building usually sets the tone of a multi-family project. Through various building designs and architectural ornamentation, desired tones and themes can be achieved. Multi-family complexes must be functional and provide adequate privacy for residents. Building design must comply with the standards provided in the Consolidated Development Code.

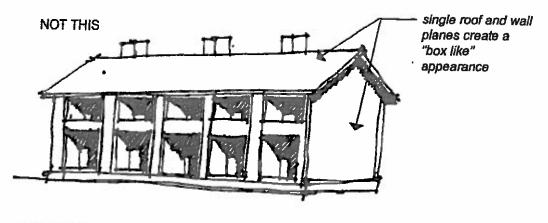
- 4.10.1 New buildings must be compatible with the surrounding buildings in size and utilize similar architectural styles. Special consideration must be given to projects next to properties used or designated as single-family residential. Building design shall incorporate similar architectural features (such as roof design, building materials, etc.) as the surrounding single-family buildings.
- 4.10.2 Within multi-building projects, architectural consistency of all buildings shall be maintained. Buildings shall have consistent color schemes, building materials, wall textures and roof material.
- 4.10.3 The use of roof-top equipment should be avoided. Projects utilizing any roof-top equipment (including satellite dishes) shall provide parapet walls and/or other architectural features to

- screen the equipment from all sides of the building. The texture and color of parapet walls shall be consistent with the texture and color of the building. Pop-through or wall mounted air conditioners are not permitted.
- 4.10.4 Reflective, untreated metal roofs are prohibited. All exposed metal surfaces shall be painted in a flat, non-glossy paint to match the color of the building. Non-anodized and unpainted aluminum window frames are not permitted. All windows shall have a trim, a minimum of 4 inches in width or decorative window shutters.
- 4.10.5 The design of accessory buildings (i.e. recreational, storage, etc.) shall be consistent with the design of the primary building(s) by using similar types of exterior wall textures, building and roof material, and color.
- 4.10.6 The roof line at the top of any structure should not run in a continuous plane for more than 50-feet without offsetting or jogging the roof plane. Roofs must have at least one of the following features around the entire building: 1) parapets concealing flat roofs, 2) overhanging eaves, 3) sloped roof, and/or 4) two or more roof slope planes.
- 4.10.7 The height of the building is to be varied so that distinctive roof lines are created.
- 4.10.8 The planes of exterior walls shall be varied in depth and/or direction. Building walls greater than 30-feet in length must incorporate recesses, a minimum depth of 5-feet, and projections, a minimum of 5-feet. (see Figure 3.14). Balconies and porches may be utilized to meet this requirement.
- 4.10.10 Parts of a building facade shall be articulated by the use of color, fenestration, arrangement of facade elements, and/or change in material. Architectural detailing such as trellises, arcades, siding, stone, or brick at the ground level shall be incorporated to eliminate monotonous facades.
- 4.10.11 Each building must have clearly placed and illuminated address and building identification.

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# 4.11 Building Design - Balconies and Patios

4.11.1 Private balconies or patios shall be screened with solid or near-solid fencing, railings or walls.

The materials shall be of comparable quality and aesthetics to those used on the rest of the project. The color shall compliment the building.

- 4.11.2 The location of balconies shall consider the solar and wind exposures and be designed accordingly. Providing roof overhangs can effectively block wind and sun, and increase energy efficiency of the residences.
- 4.11.3 Unless roof eaves extend over the balcony/patio, rain gutters shall be provided in order to collect and convey the roof run-off from the roof.

# 4.12 Building Design - Stairs

- 4.12.1 The location of stairs should consider sun exposure in order to provide quicker thaw of snow and ice.
- 4.12.2 The stairs shall be architecturally treated by providing durable and aesthetic railings, and be compatible with the architectural design of the building.
- 4.12.3 Roof eaves over stairways shall contain rain gutters in order to collect and convey run-off from the roof.

# 4.13 Garages and Carports

- 4.13.1 All carports shall have roofs. The roof design and materials must be consistent with the roof design and material of the primary building(s). Sheet metal covered carports without architectural treatment are not permitted.
- 4.13.2 The design of detached garages shall be consistent with the primary building(s) by using similar exterior wall textures, roof pitches, roof material and colors.
- 4.13.3 Parking stall spaces within the carports/garages shall be consistent with the development code. Parking spaces next to posts or walls cannot be compact size and must be increased in width by 2 feet.

# 4.14 Identification Signs

- 4.14.1 An identification sign shall have a consistent theme with the complex by using compatible colors and materials.
- 4.14.2 Any freestanding signs shall be located so that they do not interfere with circulation, parking and line of sight.
- 4.14.3 Enhanced landscaping can be used effectively to create entry-ways to the site. The use of creative designs acting as identifiable nodes is highly encouraged.
- 4.14.4 The sign shall have indirect low-intensity lighting and cannot be internally illuminated or be neon.
- 4.14.5 Monument signs shall clearly display the street number sign. The number shall be illuminated.

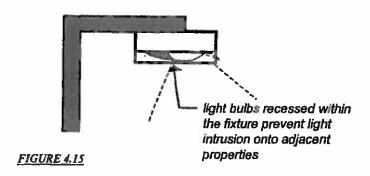
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# 4.15 Directory Signs

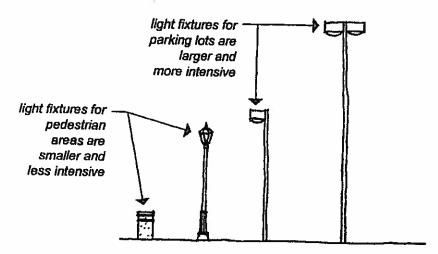
- 4.15.1 A directory sign can contain a list of all tenants and/or apartment numbers, and schematic of the complex. These signs shall be located in close proximity to each parking lot entrance for the use by emergency crews and visitors.
- 4.15.2 Complexes with more than 50 units are to provide a map of the complex at each entrance directory sign.
- 4.15.3 The materials and colors of directory signs shall compliment the project.

# 4.16 Lighting

- 4.16.1 Lighting should be used for security and safety of on-site parking and pedestrian walkways.
- 4.16.2 Lighting type and fixtures shall be consistent throughout the project.
- 4.16.3 Garages, carports and pedestrian walkways shall be properly illuminated by providing low-intensity recessed lighting. Light bulbs shall be completely recessed within the fixture or within the ceiling of a structure.
- 4.16.4 Parking and building light fixtures shall be strategically located so that excessive light is not produced. All fixtures must be cut-off luminaries with less than 90-degree candle luminance cut-off so that there is no excessive light spill-over and glare onto neighboring properties. All fixtures shall be of low intensity. (see Figure 3.15)



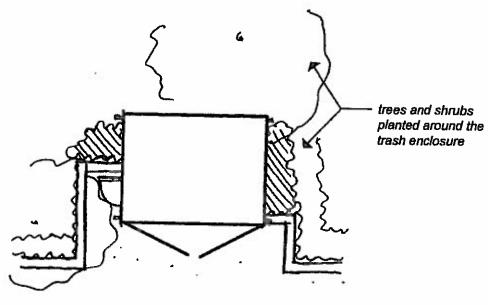
4.16.5 Shoe box, flood lights, or other similar light fixtures which illuminate horizontally are prohibited unless otherwise sufficiently screened to mitigate excessive light. Spot lights which illuminate upwards are prohibited.



# 4.17 Screening

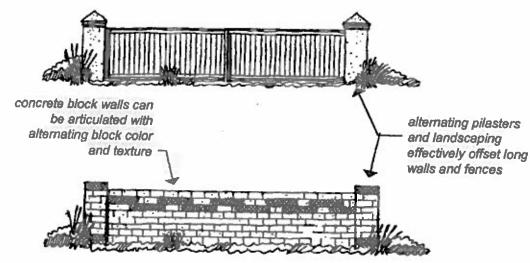
Screening can be achieved by using a variety of architectural features, landscaping, fencing and walls. Whichever method is used, it should be compatible with the site and not designed as an afterthought.

- 4.17.1 Any outdoor mechanical equipment such as transformers, HVAC units, electrical boxes, back flow preventers, etc. located on the ground must be appropriately screened from view. The method of screening shall be integrated with the adjacent structure in terms of landscaping, building color and materials, shape and size.
- 4.17.2 All roof-top equipment shall be screened from view as identified within the architectural guidelines of this manual.
- 4.17.3 Storage areas shall be screened from view by using concrete block walls or similar materials.
- 4.17.4 Trash enclosures shall be constructed of masonry block consistent in color and texture as the primary building(s). Steel gates are to be hung from individual steel posts imbedded in concrete. (see Appendix A) Trash enclosures shall be screened with landscaping including, but not limited to evergreen trees and/or columnar shrubs. (see Figure 3.17)
- 4.17.5 Accessory structures which are used for screening/storage purposes shall be architecturally compatible with the primary building(s).



# 4.18 Walls and Fences

- 4.18.1 The perimeter of the multi-family projects adjacent to properties designated zoned or occupied by single-family residential uses shall be screened by using wrought-iron or redwood fence, masonry wall, or a combination thereof. Special consideration must be given to pedestrian accessibility particularly when projects are adjacent to neighborhood services such as parks, grocery stores, or schools. The use of chainlink fence (with or without slating) in not permitted.
- 4.18.2 Walls must be designed to blend in and be compatible with the site's architecture, color and building materials. Landscaping must be used to soften the wall elevations whenever possible.
- 4.18.3 Long wall surfaces must offset and be designed to prevent monotony. Alternating colors, concrete styles, fixtures, pilasters, etc. are to be incorporated in the design. (see Figure 3.18)
- 4.18.4 Screening of patios, swimming pools, etc. shall be executed by using materials which are compatible to the primary building(s) and the overall theme of the complex. Wrought iron fences embedded in concrete, brick or stone posts are highly recommended. Except for tennis courts, chain-link fences are not permitted.



# 4.19 Postal Mail Boxes

- 4.19.1 Postal mail boxes shall be provided near site entrances/exits and are particularly encouraged to be located at the office or clubhouse facility. Sidewalks shall be provided from the residences to the mail boxes.
- 4.19.2 Area around the postal mail boxes shall be paved. The boxes shall be installed within a structure with a roof. The design, material and color of the structure shall be compatible with the primary building(s).
- 4.19.3 Within large projects (typically 50 units or more) which have multiple entries/exits, the mail boxes should be separated and placed at a convenient location which is accessible from the residences which they serve.

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# **Alleys**

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# Alleys ?

